



Contact SAMSUNG WORLDWIDE
If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

Country	Customer Care Centre ☎	Web Site
AUSTRALIA	1300 362 603	www.samsung.com/au
CHINA	800-810-5858	www.samsung.com/cn
	400-810-5858	
	010-6475 1880	
	HONG KONG:3698 - 4698	www.samsung.com/hk
INDIA	3030 8282 1-800-3000-8282 1800 110011	www.samsung.com/in
INDONESIA	0800-112-8888	www.samsung.com/id
JAPAN	0120-327-527	www.samsung.com/jp
MALAYSIA	1800-88-9999	www.samsung.com/my
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	www.samsung.com/nz
PHILIPPINES	1800-10-SAMSUNG(726-7864)	www.samsung.com/ph
SINGAPORE	1800-SAMSUNG(726-7864)	www.samsung.com/sg
THAILAND	1800-29-3232 02-689-3232	www.samsung.com/th
TAIWAN	0800-329-999	www.samsung.com/tw
VIETNAM	1 800 588 889	www.samsung.com/vn
SOUTH AFRICA	0860-SAMSUNG(726-7864)	www.samsung.com/za
U.A.E	800-SAMSUNG (726-7864) 8000-4726	www.samsung.com/ae



BN68-01701L-00



LCD TV

user manual

imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service, please register
your product at

www.samsung.com/global/register

Model _____ Serial No. _____





Without producing harmful VOC (Volatile Organic Compounds), Samsung's Eco-friendly "Crystal Design" expresses color gradation thanks to our dual injection technology.

Precautions When Displaying a Still Image

A still image may cause permanent damage to the TV screen

Do not display a still image on the LCD panel for more than 2 hours as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of the screen when displaying a still image.

Watching the LCD TV in 4:3 format for a long period of time may leave traces of borders displayed on the left, right and center of the screen caused by the difference of light emission on the screen. Playing a DVD or a game console may cause a similar effect to the screen. Damages caused by the above effect are not covered by the Warranty.

Displaying still images from Video games and PC for longer than a certain period of time may produce partial after-images. To prevent this effect, reduce the 'brightness' and 'contrast' when displaying still images.



Contents

Connecting and Preparing Your TV

■ List of Parts	2
■ Installing the Wall Mount Kit	2
■ Viewing the Control Panel	3
■ Viewing the Connection Panel	4
■ Remote Control	6
■ Mini Remote Control	7
■ Installing Batteries in the Remote Control	7
■ Switching On and Off	8
■ Placing Your Television in Standby Mode	8
■ Viewing the Menus	8
■ Using the TOOLS Button	9
■ Using the Wheel button	9
■ Plug & Play Feature	10

Channel Control

■ Storing Channels and channel	10
■ Managing Channels	13

Picture Control

■ Changing and Resetting the Picture Settings	14
■ Viewing Picture-in-Picture	17
■ PC Display	18
■ Setting up the TV with your PC	19

Sound Control

■ Changing the Sound Standard	19
■ Selecting the Sound Mode	21

Function Description

■ Configuring the Setup Menu	21
■ Setting the Time	24
■ Network Connection	25
■ Network Setup	27
■ Source List / Edit Name	28
■ Product Guide	29

WISELINK Pro

■ Connecting a USB Device	29
■ Using the WISELINK Pro Function	30
■ Using and Sorting Photo List	32
■ Viewing a Photo or Slide Show	33
■ Using and Sorting the Music List	35
■ Playing a Music	36
■ Using and Sorting the Movie List	37
■ Playing a Movie File	38
■ Deleting the Photo/Music/Movie File	39
■ Picture/Music Settings Using WISELINK Pro	40
■ Using the Setup Menu	40

WISELINK Pro-DLNA

■ Setting the DLNA Network	41
■ Installing the DLNA Application	41
■ Using the DLNA Application	43
■ Using the DLNA Function	46

Content Library

■ Activating the Content Library	47
■ Using the Content Library	48
■ Using Additional Content Using External USB Memory Storage	49

About Anynet+

■ Connecting Anynet+ Devices	50
■ Setting Up Anynet+	51
■ Scanning and Switching between Anynet+ Devices	51
■ Recording	52
■ Listening through a Receiver (Home theater)	53
■ Troubleshooting for Anynet+	53

InfoLive

■ Using InfoLive	54
■ Using the Weather Service	55
■ Using the News Service	56
■ Using the Stock Service	56
■ InfoLive Setup	57

Recommendations for Use

■ Teletext Feature	58
■ Setting Up Your Remote Control	59
■ Remote Control Codes	60
■ Auto Wall-Mount Adjustment (Sold separately) (depending on the model)	62
■ Using the Anti-Theft Kensington Lock (depending on the model)	63
■ Securing the TV to the Wall	63
■ Troubleshooting: Before Contacting Service Personnel	64
■ Specifications	65

Symbol


Press


Note

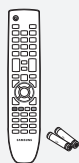

One-Touch Button


TOOL Button

Connecting and Preparing Your TV

List of Parts

Please make sure the following items are included with your LCD TV. If any items are missing, contact your dealer.



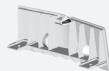
Remote Control &
Batteries
(AAA x 2)



Mini Remote Control
& Lithium battery (3V)



Power Cord



Cover-Bottom



Program CD



Cleaning Cloth

• Owner's Instructions

• Warranty card

• Safety Guide

• Registration Cards

☒ Warranty card / Safety Guide / Registration Cards (Not available in all locations)

Installing the Wall Mount Kit

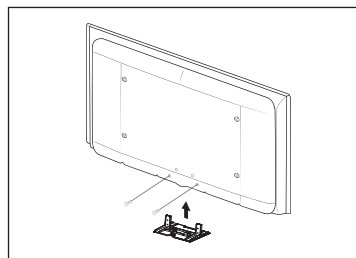
Wall mount items (sold separately) allow you to mount the TV on the wall. For detailed information on installing the wall mount, see the instructions provided with the Wall Mount items. Contact a technician for assistance when installing the wall mounted bracket. Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you elect to install the TV on your own.



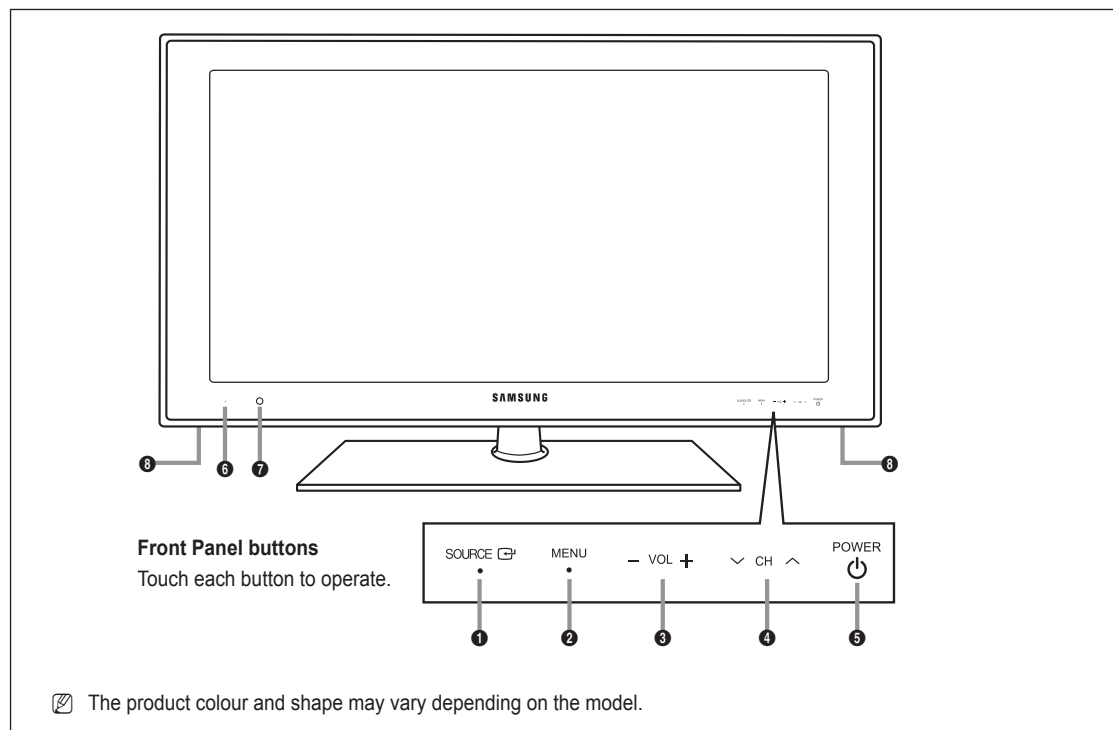
Do not install your Wall Mount Kit while your TV is turned on. It may result in personal injury due to electric shock.



Remove the stand and cover the bottom hole with a cap and fasten with two screws.



Viewing the Control Panel



1 SOURCE

Toggles between all the available input sources. In the on-screen menu, use this button as you would use the **ENTER** button on the remote control.

2 MENU

Press to see an on-screen menu of your TV's features.

3 - VOL +

Press to increase or decrease the volume. In the on-screen menu, use the **- VOL +** buttons as you would use the **◀** and **▶** buttons on the remote control.

4 ∇ CH ▲

Press to change channels. In the on-screen menu, use the **∇ CH ▲** buttons as you would use the **▼** and **▲** buttons on the remote control.

5 POWER

Press to turn the TV on and off.

6 POWER INDICATOR

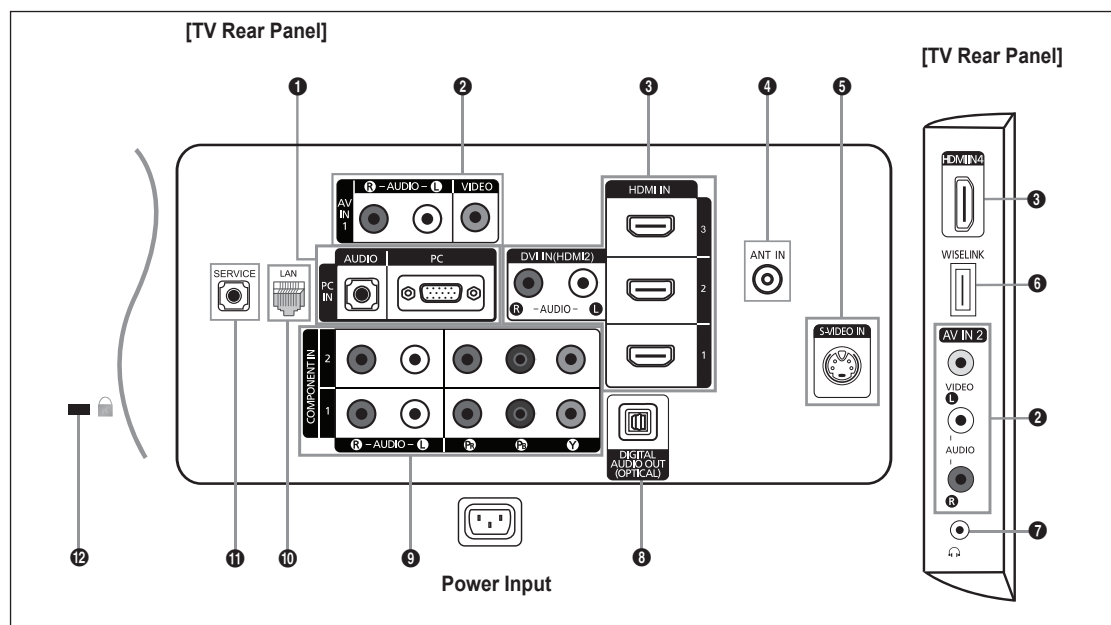
Blinks and turns off when the power is on and lights up in stand-by mode.

7 REMOTE CONTROL SENSOR

Aim the remote control towards this spot on the TV.

8 SPEAKERS

Viewing the Connection Panel



- ☑ The product colour and shape may vary depending on the model.
- ☑ Whenever you connect an external device to your TV, make sure that power on the unit is turned off.
- ☑ When connecting an external device, match the colour of the connection terminal to the cable.

1 PC IN [PC] / [AUDIO]

- Connect to the video and audio output jack on your PC.

2 VIDEO / R-AUDIO-L

- Connect RCA cable to an appropriate external A/V device such as VCR, DVD or Camcorder.
- Connect RCA audio cables to [R-AUDIO-L] on your set and the other ends to corresponding audio out connectors on the A/V device.

3 HDMI IN 1, HDMI IN 2, HDMI IN 3, HDMI IN 4

- Supports connections between HDMI-connection-enabled AV devices (Set-Top Boxes, DVD players)
- No additional Audio connection is needed for an HDMI to HDMI connection.
- When using an HDMI / DVI cable connection, you must use the **HDMI IN 2** jack.

☑ What is HDMI?

- 'High Definition Multimedia interface' allows the transmission of high definition digital video data and multiple channels of digital audio.
- The HDMI / DVI terminal supports DVI connection to an extended device with the appropriate cable (not supplied).

The difference between HDMI and DVI is that the HDMI device is smaller in size, has the HDCP (High Bandwidth Digital Copy Protection) coding feature installed, and supports multi - channel digital audio.

- ☑ The TV may not output sound and pictures may be displayed with abnormal colour when DVD players / Cable Boxes / Satellite receivers supporting HDMI versions older than 1.3 are connected. When connecting an older HDMI cable and there is no sound, connect the HDMI cable to the **HDMI IN 2** jack and the audio cables to the **DVI IN (HDMI2) [R-AUDIO-L]** jacks on the back of the TV. If this happens, contact the company that provided the DVD player / Cable Box / Satellite receiver to confirm the HDMI version, then request a firmware update. HDMI cables that are not 1.3 may cause annoying flicker or no screen display.

DVI IN(HDMI2) [R-AUDIO-L]

- DVI audio outputs for external devices.

- ☑ Supported modes for HDMI / DVI and Component.

	480i	480p	576i	576p	720p	1080i	1080p
HDMI / DVI 50Hz	X	X	X	O	O	O	O
HDMI / DVI 60Hz	X	O	X	X	O	O	O
Component	O	O	O	O	O	O	O

4 ANT IN

- To view television channels correctly, a signal must be received by the set from one of the following sources: An outdoor aerial / A cable television network / A satellite network

5 S-VIDEO

- Connect S-VIDEO cable to an appropriate external A/V device such as VCR, DVD or Camcorder.
- Connect the audio cables to AV IN 2 [R-AUDIO-L].

6 WISELINK

- Connect a USB mass storage device to view movies and photos and listen to music files.
- You can connect to Samsung's network wirelessly using the 'Samsung Wireless LAN Adapter' (Sold separately).

7 HEADPHONES JACK

- Headphone may be connected to the headphone output on your set. While the head phone is connected, the sound from the built-in speakers will be disabled.
- ☒ Using the sound function is restricted when connecting headphones to the TV.
- ☒ Prolonged use of headphones at a high volume may damage your hearing.
- ☒ You will not hear sound from the speakers when you connect headphones to the TV.
- ☒ The headphone volume and TV volume are adjusted separately.

8 DIGITAL AUDIO OUT (OPTICAL)

- Connects a set of external headphones for private listening.
- ☒ When the HDMI IN jacks are connected, the **DIGITAL AUDIO OUT (OPTICAL)** jack on the TV outputs 2 channel audio only. If you want to hear 5.1 channel audio, connect the Optical jack on the DVD player or Cable / Satellite Box directly to an Amplifier or Home Theater, not the TV.

9 COMPONENT IN 1, COMPONENT IN 2

- Connect component video cables (optional) to component connector ('P_R', 'P_B', 'Y') on the rear of your set and the other ends to corresponding component video out connectors on the DTV or DVD.
- If you wish to connect both the Set-Top Box and DTV (or DVD), you should connect the Set-Top Box to the DTV (or DVD) and connect the DTV (or DVD) to component connector ('P_R', 'P_B', 'Y') on your set.
- The P_R, P_B and Y connectors on your component devices (DTV or DVD) are sometimes labeled Y, B-Y and R-Y or Y, Cb and Cr.
- Connect RCA audio cables (optional) to [R-AUDIO-L] on the rear of your set and the other ends to corresponding audio out connectors on the DTV or DVD

10 LAN

- Connect a LAN cable to this port to connect to the Network.

11 SERVICE




- Connector for Service only.
- Connect this to the jack on the optional wall mount bracket. This will allow you to adjust the TV viewing angle using your remote control.


12 KENSINGTON LOCK (depending on the model)

- The Kensington Lock (optional) is a device used to physically fix the system when used in a public place.
- If you want to use a locking device, contact the dealer where you purchased the TV.
- The location of the Kensington Lock may be different depending on its model.




You can use the remote control up to a distance of about 23 feet from the TV.











 The performance of the remote control may be affected by bright light.

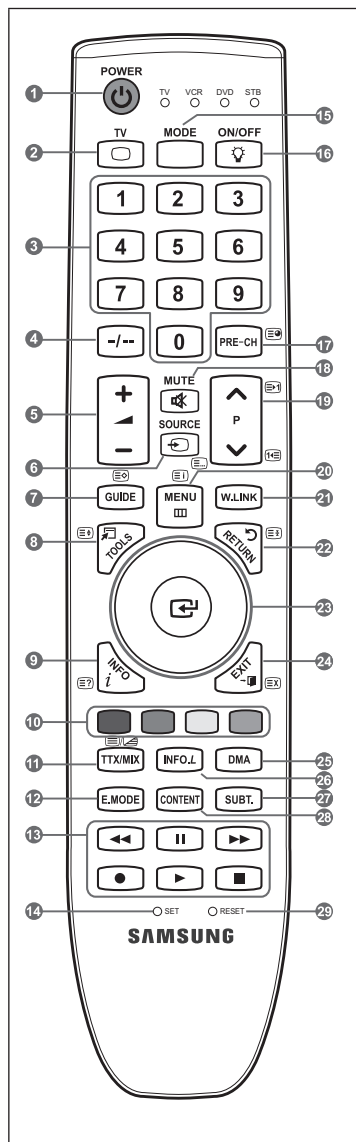
- 1 POWER**
Television Standby button.
- 2 TV**
Selects the TV mode directly.
- 3 NUMERIC BUTTONS**
Number buttons for direct channel access
- 4** 
One or more digit channel selection
- 5 VOLUME BUTTONS**
+ : Volume increase
- : Volume decrease
- 6 SOURCE**
Available source selection
- 7 GUIDE**
Electronic Programme Guide (EPG) display
- 8 TOOLS**
Use to quickly select frequently used functions.
- 9 INFO**
Use to see information on the current broadcast
- 10 COLOURS BUTTONS**
Use these buttons in the Channel list and WISELINK Pro, etc.
- 12 E.MODE**
Press to select the optional display and sound modes for sports, cinema and games.
- 13** Use these buttons in the DMA, WISELINK Pro and Anynet+. (): This remote can be used to control recording on Samsung recorders with the Anynet+ feature)
- 14 SET**
Sets the remote to control your TV, VCR, DVD, Cable Box or Set-Top Box.
- 15 MODE**
Press to operate your TV, DVD, STB or VCR (See pages 59)
- 16** Pressing the **ON/OFF**  light button toggles between on and off. When the remote control is on, and a key is pressed on the remote control, the remote control buttons will be lit for a moment.
- 17 PRE-CH**
Previous channel
- 18 MUTE**
Temporary sound switch-off

- 19** P ▲ : Next channel
P ▼ : Previous channel
- 20** **MENU**
Displays the main on-screen menu
- 21** **W.LINK**
This function enables you to view and play photo and music files from an external device.
- 22** **RETURN**
Returns to the previous menu
- 23** **UP ▲ / DOWN ▼ / LEFT ◀ / RIGHT ▶ / ENTER** 
Press the Up / Down / Left / Right sections of the wheel button and Enter to select on-screen menu items and change menu values. You can navigate up and down the menu, switch channels and adjust the volume by turning the wheel button.
- 24** **EXIT**
Exit the on-screen menu
- 25** **DMA**
Use this when connecting a SAMSUNG DMA (Digital Media Adapter) device through an HDMI interface and switching to DMA mode. (The DMA button is optional.) For more information on the operating procedures, refer to the user manual of the DMA. This button is available when "AnyNet+(HDMI-CEC)" is "On" (see page 51)
- 26** **INFO.L**
Press to use the News, Stock Market and Weather Forecast information services available over the network.
- 27** **SUBT.**
Digital subtitle display
- 28** **CONTENT**
This function enables you to view "Content Library". (see page 47)
- 29** **RESET**
When your remote does not work, change the batteries and press the RESET button for 2-3 seconds before use.

Teletext Functions

- 2 : Exit from the teletext display
- 6 : Teletext mode selection (LIST / FLOF)
- 7 : Teletext store

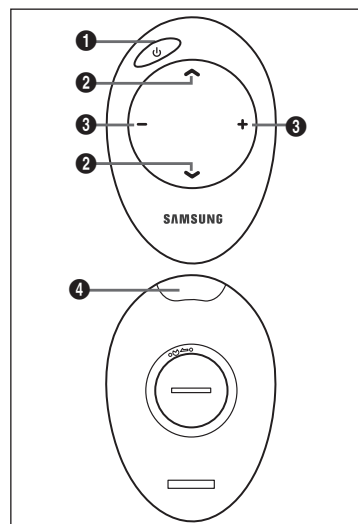
- 8  : Teletext size selection
- 9  : Teletext reveal
- 10 Fastext topic selection
- 11   : Alternately select Teletext, Double, or Mix.
- 15  : Teletext sub page
- 17  : Teletext next page
-  : Teletext previous page
- 18  : Teletext index
- 20  : Teletext hold
- 22  : Teletext cancel



Mini Remote Control

The Mini Remote Control is a simplified remote control that consists of the power, channel and volume buttons only.

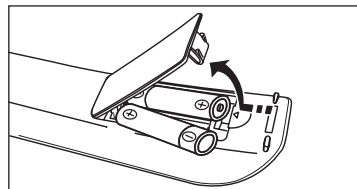
- 1 Television Standby button
 - This button only works when you press it for longer than 1.5 seconds.
- 2 : Next channel
 : Previous channel
- 3 + : Volume increase
 - : Volume decrease
- 4 IrDA transmitter
 - Use the Mini Remote Control so that this part faces the TV.



Installing Batteries in the Remote Control

Normal Remote Control

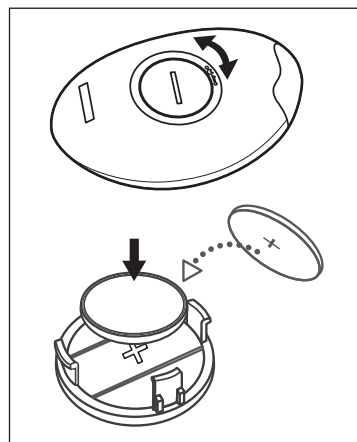
1. Lift the cover at the back of the remote control upward as shown in the figure.
2. Install two AAA size batteries.
 - Make sure to match the '+' and '-' ends of the batteries with the diagram inside the compartment.
3. Replace the cover.
 - Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.
 - Using the remote control with the **ON / OFF** light button set to on will reduce the battery usage time.



Mini Remote Control






1. Turn the battery cover counterclockwise to unlock it and then separate the battery cover.
2. Insert the corresponding 3V Lithium battery.
3. Place the battery cover into the remote control aligning it with the grooves and then turn the battery cover clockwise to lock the cover.

- If the remote control doesn't work, check the following:
 1. Is the TV power on?
 2. Are the plus and minus ends of the batteries reversed?
 3. Are the batteries drained?
 4. Is there a power outage or is the power cord unplugged?
 5. Is there a special fluorescent light or neon sign nearby?







Switching On and Off

The mains lead is attached to the rear of your set.




1. Plug the mains lead into an appropriate socket.
 - ☑ The standby indicator lights up on your set.
2. Press the  button on your set.
 - ☑ You also can press the **POWER**  button or the **TV** button on the remote control to turn the TV on.
 - ☑ The programme that you were watching last is reselected automatically.
3. Press the numeric button (0~9) or channel up / down ( / ) button on the remote control or **▼ CH ▲** button on your set.
 - ☑ When you switch the set on for the very first time, you will be asked to choose language in which the menus are to be displayed.
4. To switch your set off, press the **POWER**  button again.

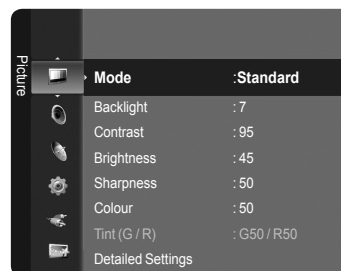
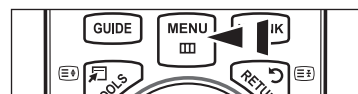
Placing Your Television in Standby Mode

Your set can be placed in standby mode in order to reduce the power consumption. The standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

1. Press the **POWER**  button on the remote control.
 - ☑ The screen is turned off and a red standby indicator appears on your set.
2. To switch your set back on, simply press the **POWER** , numeric buttons (0~9), **TV** button or channel up / down ( / ) button again.
 - ☑ Do not leave your set in standby mode for long periods of time (when you are away on holiday, for example). It is best to unplug the set from the mains and aerial.

Viewing the Menus

1. With the power on, press the **MENU** button. The main menu appears on the screen. The menu's left side has icons: Picture, Sound, Channel, Setup, Input, Application.
2. Press the  or  button to select one of the icons. Then press the **ENTER**  button to access the icon's sub-menu.
3. Press the **EXIT** button to exit.
 - ☑ The on-screen menus disappear from the screen after about one minute.

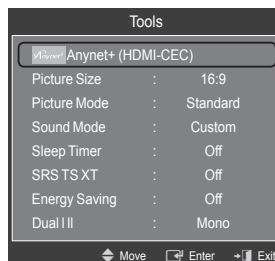


Using the TOOLS Button

You can use the **TOOLS** button to select your frequently used functions quickly and easily. The "Tools" menu changes depending on which external input mode you are viewing.

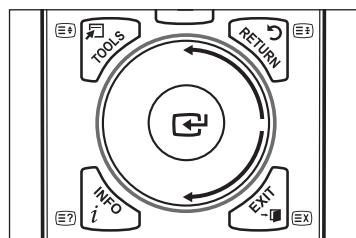
1. Press the **TOOLS** button. The "Tools" menu will appear.
2. Press the **▲** or **▼** button to select a menu.
3. Press the **▲** / **▼** / **◀** / **▶** / **ENTER** buttons to display, change, or use the selected items. For a more detailed description of each function, refer to the corresponding page.

- Anynet+ (HDMI-CEC): see page 51
- Picture Size: see page 16
- Picture Mode: see page 14
- Sound Mode: see page 19
- Sleep Timer: see page 24
- SRS TS XT: see page 19
- Energy Saving: see page 23
- Dual I II: see page 21
- PIP: see page 17
- Auto Adjustment: see page 19



Using the Wheel button

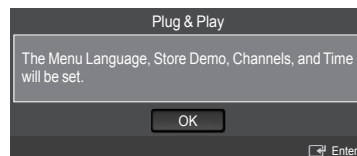
- To increase the channel number, turn the wheel clockwise when the Channel Display is displayed. To decrease the channel number, turn the wheel counterclockwise.
- To turn the volume up, turn the wheel clockwise when the Volume Control window is displayed. To turn the volume down, turn the wheel counterclockwise.
- To move to a lower menu, turn the wheel clockwise when the menu Display is displayed. To move to a higher menu, turn the wheel counterclockwise.



Plug & Play Feature

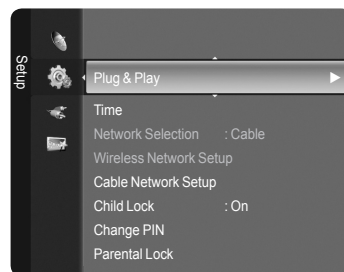
When the TV is initially powered on, basic settings proceed automatically and subsequently.

1. Press the **POWER** button on the remote control. The message "The Menu Language, Store Demo, Channels, and Time will be set." is displayed.
2. Press the **ENTER** button.
3. Press the **◀** or **▶** button to select "Store Demo" or "Home Use", then the **ENTER** button.
 - ☑ We recommend setting the TV to "Home Use" mode for the best picture in your home environment.
 - ☑ "Store Demo" mode is only intended for use in retail environments.
 - ☑ If the unit is accidentally set to "Store Demo" mode and you want to return to "Home Use" (Standard): Press the Volume button on the TV. When the volume OSD is displayed, press and hold the **MENU** button on the TV for 5 seconds.
4. Press the **▲** or **▼** button to select the channel source to memorize. Press the **ENTER** button to select "Start".
 - ☑ Digital & Analogue: Digital and Analogue channels.
Digital: Digital channels.
Analogue: Analogue channels.
 - ☑ The channel search will start and end automatically.
 - ☑ Press the **ENTER** button at any time to interrupt the memorization process.
 - ☑ After all the available channels are stored, the message "Set the Clock Mode." is displayed.
5. Press the **ENTER** button. Press the **▲** or **▼** button to select "Manual", then Press the **ENTER** button.
 - ☑ If you select "Auto", see page 24 to set the clock. If you have received a digital signal, the time will be set automatically.
6. Select the "Day", "Month", "Year", "Hour" or "Minute" by pressing the **◀** or **▶** button. Set the "Day", "Month", "Year", "Hour" or "Minute" by pressing the **▲** or **▼** button.
 - ☑ You can also set the "Day", "Month", "Year", "Hour" or "Minute" by pressing the number buttons on the remote control.
7. The message "Enjoy your viewing" is displayed. When you have finished, press the **ENTER** button.



If you want to reset this feature...

1. Press the **MENU** button to display the menu. Press the **▲** or **▼** button to select "Setup", then press the **ENTER** button.
2. Press the **ENTER** button again to select "Plug & Play".
3. Enter your 4 digit PIN number. The default PIN number of a new TV set is '0-0-0-0'.
 - ☑ If you want to change PIN number, refer to page 21.
 - ☑ The "Plug & Play" feature is only available in the TV mode.



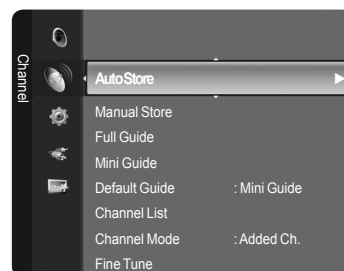
Channel Control

Storing Channels and channel

❑ Auto Store

You can scan for the frequency ranges available to you (and availability depends on your country). Automatically allocated programme numbers may not correspond to actual or desired programme numbers.

- Digital & Analogue: Digital and Analogue channels.
 - Digital: Digital channels.
 - Analogue: Analogue channels.
- ☑ Scans for all channels with active broadcast stations and stores them in the TV's memory.
 - ☑ If you want to stop Auto Store, press the **ENTER** button.
 - ☑ The "Stop Auto Store?" message will be displayed.
 - ☑ Select "Yes" by pressing the **◀** or **▶** button, then press the **ENTER** button.
 - ☑ If a channel is locked using the "Child Lock" function, the PIN input window appears.



❑ Manual Store

- ✎ Scans for a channel manually and stores it in the TV's memory.
- ✎ If a channel is locked using the "Child Lock" function, the PIN input window appears.

■ Digital Channel

Manual store for digital channels.

- Channel: Set the Channel number using the ▲, ▼ or number (0~9) buttons.
- Frequency: Set the frequency using the number buttons.
- Bandwidth: Set the bandwidth using the ▲, ▼ or number (0~9) buttons.
- ✎ When it has finished, channels are updated in the channel list.

■ Analogue Channel

Manual store for analogue channel.

- ✎ "Analogue Channel" is only available in analogue TV mode.
- Programme (Programme number to be assigned to a channel): Sets the programme number using the ▲, ▼ or number (0~9) buttons.
- Colour System → Auto / PAL / SECAM / NTSC4.43: Sets the colour system value using the ▲ or ▼ button.
- Sound System → BG / DK / I / L: Sets the sound system value using the ▲ or ▼ button.
- Channel (When you know the number of the channel to be stored): Press the ▲ or ▼ button to select "C" (Air channel) or "S" (Cable channel). Press the ► button, then press the ▲, ▼ or number (0~9) buttons to select the required number.
 - ✎ You can also select the channel number directly by pressing the number (0~9) buttons.
 - ✎ If there is abnormal sound or no sound, reselect the sound standard required.
- Search (When you do not know the channel numbers): Press the ▲ or ▼ button to start the search. The tuner scans the frequency range until the first channel or the channel that you selected is received on the screen.
- Store (When you store the channel and associated programme number): Set to "OK" by pressing the **ENTER** button.
- ✎ **Channel mode**
 - P (Programme mode): When completing tuning, the broadcasting stations in your area have been assigned to position numbers from P00 to P99. You can select a channel by entering the position number in this mode.
 - C (Air channel mode): You can select a channel by entering the assigned number to each air broadcasting station in this mode.
 - S (Cable channel mode): You can select a channel by entering the assigned number for each cable channel in this mode.

❑ Full Guide / Mini Guide

The EPG (Electronic Programme Guide) information is provided by the broadcasters. Programme entries may appear blank or out of date as a result of the information broadcast on a given channel. The display will dynamically update as soon as new information becomes available.

- ✎ For the detailed procedures on using "Full Guide" and "Mini Guide", refer to the descriptions on page 12.

- ✎ You can also display the guide menu simply by pressing the **GUIDE** button.
(To configure the "Default Guide", refer to the descriptions.)



- Full Guide: Displays the programme information as time ordered One hour segments. Two hours of programme information is displayed which may be scrolled forwards or backwards in time.
- Mini Guide: The information of each programme is displayed by each line on the current channel Mini Guide screen from the current programme onwards according to the programme starting time order.

❑ Default Guide

- Mini Guide / Full Guide: You can decide whether to display either the "Mini Guide" or the "Full Guide" when the **GUIDE** button on the remote control is pressed.

❑ Channel List

For the detailed procedures on using the "Channel List", refer to the descriptions on pages 13~14.

❑ Channel Mode

When press the **P** ∇/\wedge button, Channels will be switched within the selected channel list.

- Added Ch.: Channels will be switched within the memorized channel list.
- Favourite Ch.: Channels will be switched within the favourite channel list.

❑ Fine Tune

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, you may have to fine tune the channel manually.

- ☑ Fine tuned channels that have been saved are marked with an asterisk "*" on the right-hand side of the channel number in the channel banner.
- ☑ To reset the fine-tuning, select "Reset" by pressing the \blacktriangle or \blacktriangledown button and then press the **ENTER** \square button.
- ☑ Only Analogue TV channels can be fine tuned.

❑ Signal Information

You can get information about the signal status.

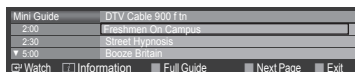
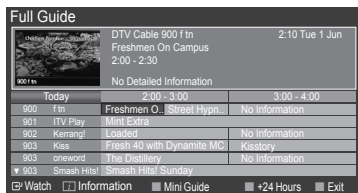
- ☑ If the signal status is poor, the "Weak or No signal" message is displayed.
- ☑ While viewing a Digital channel, this function can be selected.

❑ LNA \rightarrow On / Off

If the TV is operating in a weak-signal area, the LNA (Low Noise Amplifier) function can improve the reception (a low-noise preamplifier boosts the incoming signal).

- ☑ While viewing an Analogue channel, this function can be selected.

Using the Full / Mini Guide

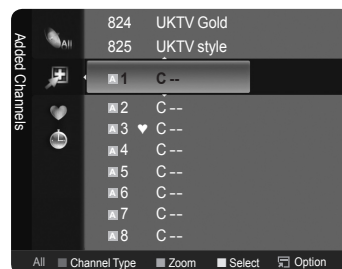
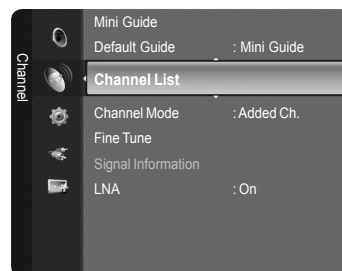


To...	Then...
Watch a programme in the EPG list	Select a programme by pressing the \blacktriangle , \blacktriangledown , \blacktriangleleft , \blacktriangleright button.
Exit the guide	Press the blue button
If the next programme is selected, it is scheduled with the clock icon displayed. If the ENTER \square button is pressed again, press the \blacktriangleleft , \blacktriangleright button to select Cancel Schedules, the scheduling is canceled with the clock icon gone.	
View programme information	Select a programme of your choice by pressing the \blacktriangle , \blacktriangledown , \blacktriangleleft , \blacktriangleright button. Then press the INFO button when the programme of your choice is highlighted. The programme title is on the upper part of the screen center.
Please click on INFO button for the detailed information. Channel Number, Running Time, Status Bar, Parental Level, Video Quality Information (HD / SD), Sound Modes, Subtitle or Teletext, languages of Subtitle or Teletext and brief summary of the highlighted programme are included on the detailed information. "..." will be appeared if the summary is long.	
Toggle between the "Mini Guide" or "Full Guide"	Press the red button repeatedly.
In Full Guide Scrolls backwards quickly (24 hours). Scrolls forwards quickly (24 hours).	Press the green button repeatedly. Press the yellow button repeatedly.
In Mini Guide Display next page quickly. Display previous page quickly.	Press the yellow button. Press the green button.

Managing Channels

Using this menu, you can Add / Delete or set Favourite channels and use the programme guide for digital broadcasts.

- ☑ Select a channel in the "All Channels", "Added Channels" or "Favourite" screen by pressing the ▲ / ▼ buttons, and pressing the **ENTER** button. Then you can watch the selected channel.
 - All Channels: Shows all currently available channels.
 - Added Channels: Shows all added channels.
 - Favourites: Shows all favourite channels.
 - Programmed: Shows all current reserved programmes.
- ☑ **Using the Colour buttons with the Channel List**
 - **Red** (Channel Type): Toggle between your "TV", "Radio", "Data / Other" and "All".
 - **Green** (Zoom): Enlarges or shrinks a channel number.
 - **Yellow** (Select): Selects multiple channel lists.
 - **TOOLS** (Option): Displays the "Delete" (or "Add"), "Add to Favourite" (or "Delete from Favourite"), "Lock" (or "Unlock"), "Timer Viewing", "Edit Channel Name", "Sort", "Edit Channel Number", "Select All", "Deselect All" or "Auto Store" menu. (The Options menus may differ depending on the situation.)



☑ Channel Status Display Icons

	An analogue channel.		A channel selected by pressing the yellow button.
	A channel set as a Favourite.		A programme currently being broadcast.
	A locked channel.		A reserved programme

Channel List Option Menu (in All Channels / Added Channels / Favourites)

- ☑ Press the **TOOLS** button to use the option menu.
- ☑ Option menu items may differ depending on the channel status.
- **Add / Delete**

You can delete or add a channel to display the channels you want.

 - ☑ All deleted channels will be shown on "All Channels" menu.
 - ☑ A gray-coloured channel indicates the channel has been deleted.
 - ☑ The "Add" menu only appears for deleted channels.
 - ☑ You can also delete a channel to the "Added Channels" or "Favourite" menu in the same manner.
- **Add to Favourite / Delete from Favourite**

You can set channels you watch frequently as favourites.

 - ☑ The "♥" symbol will be displayed and the channel will be set as a favourite.
 - ☑ All favourite channels will be shown on "Favourite" menu.
- **Lock / Unlock**

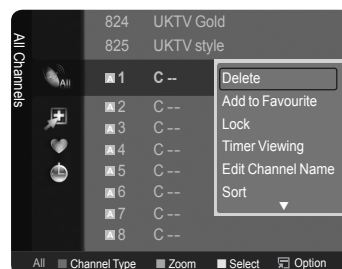
You can lock a channel so that the channel cannot be selected and viewed. This function is available only when the "Child Lock" is set to "on". (see page 21)

 - ☑ The PIN number input screen appears. Enter your 4 digit PIN number.
 - ☑ The default PIN number of a new TV set is "0-0-0-0". You can change the PIN, by selecting "Change PIN" from the menu.
 - ☑ The "🔒" symbol will be displayed and the channel will be locked.
- **Timer Viewing**

If you reserve a programme you want to watch, the channel is automatically switched to the reserved channel in the Channel List; even when you are watching another channel. To reserve a programme, set the current time first. (See page 24)

 - ☑ Only memorized channels can be reserved.
 - ☑ You can set the channel, day, month, year, hour and minute directly by pressing the number buttons on the remote control.
 - ☑ Reserving a programme will be shown on "Programmed" menu.
- ☑ **Digital Programme Guide and Viewing Reservation**

When a digital channel is selected, and you press the ► button, the Programme Guide for the channel appears. You can reserve a programme according to the procedures described above.

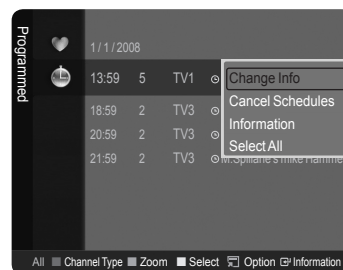


- Edit Channel Name (only analogue channel)
Channels can be labeled so that their call letters appear whenever the channel is selected.
 - ☑ The names of digital broadcasting channels are automatically assigned and cannot be labeled.
- Edit Channel Number (only digital channel)
You can also edit the channel number by pressing the number buttons on the remote control.
- Sort (only analogue channel)
This operation allows you to change the programme numbers of the stored channels. This operation may be necessary after using the auto store.
- Select All / Deselect All
 - Select All: You can select all the channels in the channel list.
 - Deselect All: You can deselect all the selected channels by pressing the yellow button.
 - ☑ You can perform the add / delete, add to Favourites / delete from Favourites, or lock / unlock function for multiple channels at the same time. Select the required channels and press the yellow button to set all the selected channels at the same time.
 - ☑ The ✓ mark appears to the left of the selected channels.
 - ☑ You can only select "Deselect All" when there is a selected channel.
- Auto Store
 - ☑ For further details on setting up options, refer to page 10.
 - ☑ If a channel is locked using the "Child Lock" function, the PIN input window appears.

Channel List Option Menu (in Programmed)

You can view, modify or delete a reservation.

- ☑ Press the **TOOLS** button to use the option menu.
- Change Info: Select to change a viewing reservation.
- Cancel Schedules: Select to cancel a viewing reservation.
- Information: Select to view a viewing reservation. (You can also change the reservation information.)
- Select All: Select all reserved programmes.



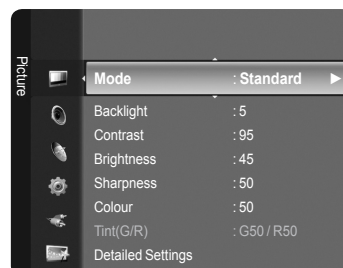
Picture Control

Changing and Resetting the Picture Settings

□ Mode

You can select the type of picture which best corresponds to your viewing requirements.

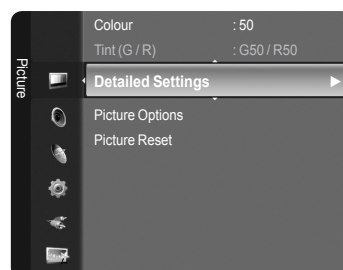
- Dynamic: Selects the picture for high-definition in a bright room.
- Standard: Selects the picture for the optimum display in a normal environment.
- Movie: Selects the picture for viewing movies in a dark room.
- ☑ Press the **TOOLS** button to display "Tools" menu. You can also set the picture mode by selecting "Tools → Picture Mode".



□ Backlight / Contrast / Brightness / Sharpness / Colour / Tint(G/R)

Your television has several setting options that allow you to control the picture quality.

- Backlight: Adjusts the brightness of LCD back light.
- Contrast: Adjusts the contrast level of the picture.
- Brightness: Adjusts the brightness level of the picture.



- Sharpness: Adjusts the edge definition of the picture.
- Colour: Adjusts colour saturation of the picture.
- Tint(G/R): Adjusts the colour tint of the picture.
- ☑ Select a picture mode to be adjusted first. The adjusted values are saved for each picture mode.
- ☑ When you make changes to "Backlight", "Contrast", "Brightness", "Sharpness", "Colour" or "Tint(G/R)", the OSD will be adjusted accordingly.
- ☑ In analogue TV, AV1, AV2, S-Video modes of the PAL system, you cannot use the "Tint" Function.
- ☑ In PC mode, you can only make changes to "Backlight", "Contrast" and "Brightness".
- ☑ Settings can be adjusted and stored for each external device you have connected to an input of the TV.
- ☑ The energy consumed during use can be significantly reduced if the level of brightness of the picture is reduced, and then this will reduce the overall running cost.

❑ Detailed Settings

Samsung's new TVs allow you to make even more precise picture settings than previous models. See below to adjust detailed picture settings.

- ☑ "Detailed Settings" is available in "Standard" or "Movie" mode.
- ☑ In PC mode, you can only make changes to "Dynamic Contrast", "Gamma" and "White Balance" from among the "Detailed Settings" items.
- Black adjust → Off / Low / Medium / High
You can select the black level on the screen to adjust the screen depth.
- Dynamic Contrast → Off / Low / Medium / High
You can adjust the screen contrast so that the optimal contrast is provided.
- Gamma
You can adjust the Primary Colour (Red, Green, Blue) Intensity.
- Colour Space
Colour Space is a colour matrix composed of red, green and blue colours. Select your favourite Colour Space to experience the most natural colour.
 - Auto: Auto Colour Space automatically adjusts to the most natural colour tone based on programme sources.
 - Native: Native Colour Space offers deep and rich colour tone.
 - Custom: Adjusts the colour range to suit your preference.
 - ☑ **Customizing the Colour Space**
 - Colour → Red / Green / Blue / Yellow / Cyan / Magenta
 - Adjusts the Colour range to suit your preference. "Colour" is available when "Colour Space" is set to "Custom".
 - Red / Green / Blue: In "Colour", you can adjust the RGB values for the selected colour.
 - Reset: Resets the colour space to the default values.
- White Balance
You can adjust the colour temperature for more natural picture colours.
 - R-Offset / G-Offset / B-Offset / R-Gain / G-Gain / B-Gain: Changing the adjustment value will refresh the adjusted screen.
 - Reset: The previously adjusted white balance will be reset to the factory defaults.
- Flesh Tone
You can emphasize the pink 'flesh tone' in the picture.
 - ☑ Changing the adjustment value will refresh the adjusted screen.
- Edge Enhancement → Off / On
You can emphasize object boundaries in the picture.
- xvYCC → Off / On
Setting the xvYCC mode to on increases detail and colour space when watching movies from an external device (i.e. DVD player).
 - ☑ "xvYCC" is available when the picture mode is set to "Movie", and the external input is set to "HDMI" or "Component" mode.
 - ☑ If "xvYCC" function is active, PIP cannot be selected.

❑ Picture Options

☑ In PC mode, you can only make changes to the "Colour Tone" and "Size" from among the items in "Picture Options".

■ Colour Tone → Cool2 / Cool1 / Normal / Warm1 / Warm2

You can select the most comfortable colour tone to your eyes.

☑ The adjusted values are stored according to the selected "Picture" mode.

☑ "Warm1" or "Warm2" is only activated when the picture mode is "Movie".

■ Size

You can select the picture size which best corresponds to your viewing requirements.

🔧 Press the **TOOLS** button to display "Tools" menu. You can also set the size by selecting "Tools → Picture Size".

- Auto Wide: Automatically adjusts the picture size to the "16:9" aspect ratio.
- 16:9: Adjusts the picture size to 16:9 appropriate for DVDs or wide broadcasting.
- Wide Zoom: Magnify the size of the picture more than 4:3.
- Zoom: Magnifies the 16:9 wide picture (in the vertical direction) to fit the screen size.
- 4:3: This is the default setting for a video movie or normal broadcasting.
- Just Scan: Use the function to see the full image without any cutoff when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are input.
 - ☑ Depending on the input source, the picture size options may vary.
 - ☑ The items available may differ depending on the selected mode.
 - ☑ In PC Mode, only "16:9" and "4:3" mode can be adjusted.
 - ☑ Settings can be adjusted and stored for each external device you have connected to an input of the TV.
 - ☑ Temporary image retention may occur when viewing a static image on the set for more than two hours.
 - ☑ "Wide Zoom": Press the ► button to Select "Position", then press the **ENTER** button. Press the ▲ or ▼ button to move the screen up / down. Then press the **ENTER** button.
 - ☑ "Zoom": Press the ► button to Select "Position", then press the **ENTER** button. Press the ▲ or ▼ button to move the picture up and down. Then press the **ENTER** button. Press the ► button to Select "Size", then press the **ENTER** button. Press the ▲ or ▼ button to magnify or reduce the picture size in the vertical direction. Then press the **ENTER** button.
 - ☑ After selecting "Just Scan" in HDMI (1080i / 1080p) or Component (1080i / 1080p) mode: Select "Position" by pressing the ◀ or ▶ button. Use the ▲, ▼, ◀ or ▶ button to move the picture.
Reset: Press the ◀ or ▶ button to select "Reset", then press the **ENTER** button. You can initialize the setting.
 - ☑ If you use the "Just Scan" function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function.
 - ☑ When Double (□, □) mode has been set in PIP, the Picture Size cannot be set.
 - ☑ "Auto Wide" is only activated in TV, AV or S-Video mode.

■ Screen Mode → 16:9 / Wide Zoom / Zoom / 4:3

When setting the picture size to "Auto Wide" in a 16:9 wide TV, you can determine the picture size you want to see the 4:3 WSS (Wide Screen Service) image or nothing. Each individual country requires different picture size so this function is intended for users to select it.

- 16:9: Sets the picture to 16:9 wide mode.
- Wide Zoom: Magnify the size of the picture more than 4:3.
- Zoom: Magnify the size of the picture vertically on screen.
- 4:3: Sets the picture to 4:3 normal mode.
 - ☑ This function is available in "Auto Wide" mode.
 - ☑ This function is not available in "PC", "Component" or "HDMI" mode.

■ Digital NR → Off / Low / Medium / High / Auto

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.

☑ When the signal is weak, select one of the other options until the best picture is displayed.

■ DNLe → Off / Demo / On

This TV includes the DNLe function so as to provide a high visual quality. If you set DNLe to on, you can view the screen with the DNLe feature activated. If you set the DNLe to Demo, you can view the applied DNLe and normal pictures on the screen, for demonstration purposes. Using this function, you can view the difference in the visual quality.

☑ **DNLe™ (Digital Natural Image engine) DNLe™**

This feature brings you more detailed image with 3D noise reduction, detail enhancement, contrast enhancement and white enhancement. New image compensation Algorithm gives brighter, clearer, more detailed image to you. DNLe™ technology will fit every signal into your eyes.

☑ This function is not available in "Movie" and "Standard" mode.

- **HDMI Black Level → Normal / Low**
You can directly select the black level on the screen to adjust the screen depth.
☒ This function is active only when the external input connects to HDMI (RGB signals).
- **100Hz Motion Plus → Off / Low / Medium / High / Demo**
Removes drag from fast scenes with a lot of movement to provide a clearer picture.
☒ This function is not available in PC mode.
☒ If you enable "100 Hz Motion Plus", noise may appear on the screen. If this occurs, set "100Hz Motion Plus" to "off" or select one of the other options.
- **Blue Only Mode → Off / On**
This function is for AV device measurement experts. This function displays the blue signal only by removing the red and green signals from the video signal so as to provide a Blue Filter effect that is used to adjust the Colour and Tint of video equipment such as DVD players, Home Theaters, etc. Using this function, you can adjust the Colour and Tint to preferred values appropriate to the signal level of each video device using the Red / Green / Blue / Cyan / Magenta / Yellow Colour Bar Patterns, without using an additional Blue Filter.
☒ "Blue Only Mode" is available when the picture mode is set to "Movie" or "Standard".
- ❑ **Picture Reset → Reset Picture Mode / Cancel**
Resets all picture settings to the default values.
☒ Select a picture mode to be reset. The reset is performed for each picture mode.

Viewing Picture-in-Picture










You can display a sub picture within the main picture of set programme or video input. In this way, you can watch the picture of set programme or video input from any connected equipment while watching the main picture.

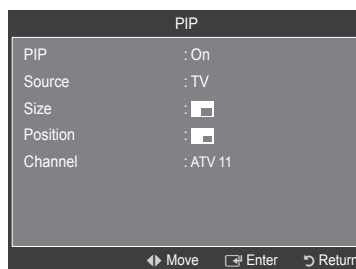
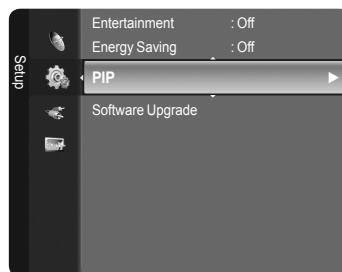
- ☒ You may notice that the picture in the PIP window becomes slightly unnatural when you use the main screen to view a game or karaoke.
- ☒ Press the **TOOLS** button to display "Tools" menu. You can also configure PIP related settings by selecting "Tools → PIP".

❑ PIP → On / Off

You can activate or deactivate the PIP function.

Main picture	Sub picture
Component1, Component2	
HDMI 1, HDMI / DVI 2, HDMI 3, HDMI 4	TV, AV1, AV2
PC	

- **Source**
You can select a source of the sub-picture.
- **Size →  /  / **
You can select a size of the sub-picture.
☒ If main picture is in "HDMI" mode, "Size" is available.
- **Position →  /  /  / **
You can select a position of the sub-picture.
☒ In Double ( , ) mode, "Position" cannot be selected.
- **Channel**
You can select a channel of the sub-picture only when the "Source" is set to "TV".



PC Display

Setting Up Your PC Software (Based on Windows XP)

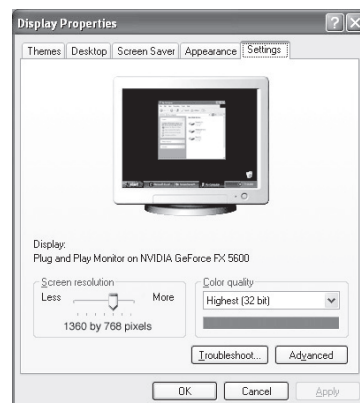
The Windows display-settings for a typical computer are shown below. The actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. However, even if your actual screens look different, the same basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)

1. First, click on 'Control Panel' on the Windows start menu.
2. When the control panel window appears, click on 'Appearance and Themes' and a display dialog-box will appear.
3. When the control panel window appears, click on 'Display' and a display dialog-box will appear.
4. Navigate to the 'Settings' tab on the display dialog-box.

The correct size setting (resolution)

Optimum: 1920 X 1080 pixels

If a vertical-frequency option exists on your display settings dialog box, the correct value is '60' or '60 Hz'. Otherwise, just click 'OK' and exit the dialog box.



Display Modes

Both screen position and size will vary depending on the type of PC monitor and its resolution. The resolutions in the table are recommended.

■ D-Sub Input

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
IBM	640 x 350	31.469	70.086	25.175	+ / -
	720 x 400	31.469	70.087	28.322	- / +
VESA	640 x 480	31.469	59.940	25.175	- / -
	640 x 480	37.861	72.809	31.500	- / -
	640 x 480	37.500	75.000	31.500	- / -
	800 x 600	37.879	60.317	40.000	+ / +
	800 x 600	48.077	72.188	50.000	+ / +
	800 x 600	46.875	75.000	49.500	+ / +
	1024 x 768	48.363	60.004	65.000	- / -
	1024 x 768	56.476	70.069	75.000	- / -
	1024 x 768	60.023	75.029	78.750	+ / +
	1280 x 1024	63.981	60.020	108.000	+ / +
	1280 x 1024	79.976	75.025	135.000	+ / +
	1360 x 768	47.712	60.015	85.500	+ / +
CVT	1600 x 1200	75.000	60.000	162.000	+ / +
	1920 x 1080RB	66.587	59.934	138.500	+ / -

■ HDMI / DVI Input

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
VESA	640 x 480	31.469	59.940	25.175	- / -
	800 x 600	37.879	60.317	40.000	+ / +
	1024 x 768	48.363	60.004	65.000	- / -
	1280 x 1024	63.981	60.020	108.000	+ / +
	1360 x 768	47.712	60.015	85.500	+ / +
	1600 x 1200	75.000	60.000	162.000	+ / +
CEA	1920 x 1080p	67.500	60.000	148.500	+ / +

- ⓧ When using an HDMI / DVI cable connection, you must use the **HDMI IN 2** jack.
- ⓧ The interface mode is not supported.
- ⓧ The set might operate abnormally if a non-standard video format is selected.
- ⓧ Separate and Composite modes are supported. SOG is not supported.
- ⓧ Too long or low quality VGA cable can cause picture noise at high resolution modes (1920x1080 or 1600x1200).

Setting up the TV with your PC

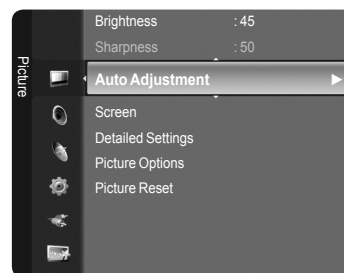
Preset: Press the **SOURCE** button to select PC mode.

Auto Adjustment

Auto Adjustment allows the PC screen of set to self-adjust to the incoming PC video signal. The values of fine, coarse and position are adjusted automatically.

This function does not work in DVI-HDMI mode.

Press the **TOOLS** button to display "Tools" menu. You can also set the Auto Adjustment by selecting "Tools → Auto Adjustment".



Screen

- **Coarse / Fine:** The purpose of picture quality adjustment is to remove or reduce picture noise. If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (Coarse) and Fine-tune again. After the noise has been reduced, readjust the picture so that it is aligned on the center of screen.
- **PC Position:** Adjust the PC's screen positioning if it does not fit the TV screen. Press the ▲ or ▼ button to adjusting the Vertical-Position. Press the ◀ or ▶ button to adjust the Horizontal-Position.
- **Image Reset:** You can replace all image settings with the factory default values.

Sound Control

Changing the Sound Standard

Mode → Standard / Music / Movie / Speech / Custom

You can select the type of special sound effect to be used when watching a given broadcast.

Press the **TOOLS** button to display "Tools" menu. You can also configure the sound mode by selecting "Tools → Sound Mode".

Equalizer

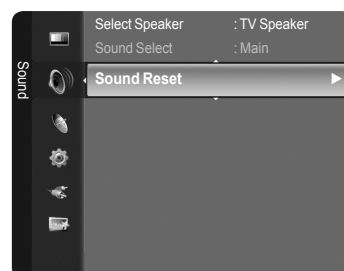
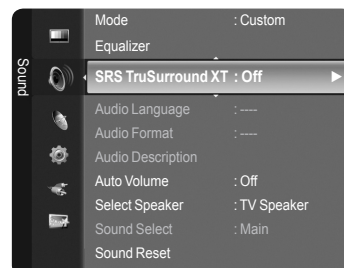
The sound settings can be adjusted to suit your personal preferences.

- **Mode:** You can select a sound mode to suit your personal preferences.
- **Balance:** Controls the balance between the right and left speakers.
- **100Hz / 300Hz / 1kHz / 2kHz / 3kHz / 10kHz (Bandwidth Adjustment):** To adjust the level of different bandwidth frequencies
- **Reset:** Resets the equalizer settings to the default values.

SRS TruSurround XT → Off / On

TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

Press the **TOOLS** button to display "Tools" menu. You can also set the SRS TruSurround XT by selecting "Tools → SRS TS XT".



TruSurround XT, SRS and Symbol are trademarks of SRS Labs, Inc. TruSurround XT technology is incorporated under license from SRS Labs, Inc.

❑ Audio Language

You can change the default value for audio languages. Displays the language information for the incoming stream.

- ☑ While viewing a digital channel, this function can be selected.
- ☑ You can only select the language among the actual languages being broadcast.

❑ Audio Format → MPEG / Dolby Digital / Advanced

When sound is emitted from both the main speaker and the audio receiver, a sound echo may occur due to the decoding speed difference between the main speaker and the audio receiver. In this case, use the TV Speaker function.

- ☑ While viewing a digital channel, this function can be selected.
- ☑ The "Audio Format" appears according to the broadcasting signal.



Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

❑ Audio Description

This is an auxiliary audio function that provides an additional audio track for visually challenged persons. This function handles the Audio Stream for the AD (Audio Description), when it is sent along with the Main audio from the broadcaster. Users can turn the Audio Description On or Off and control the volume.

- Audio Description → Off / On: Turn the audio description function on or off.
- Volume: You can adjust the audio description volume.
 - ☑ "Volume" is active when "Audio Description" is set to "On".
 - ☑ While viewing a Digital channel, this function can be selected.

❑ Auto Volume → Off / On

Each broadcasting station has its own signal conditions, and so it is not easy to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

❑ Select Speaker → External Speaker / TV Speaker

If you want to hear the sound through separate speakers, cancel the internal amplifier.

- ☑ The volume buttons and **MUTE** buttons do not operate when the "Select Speaker" is set to "External Speaker".
- ☑ If you select "External Speaker" in the "Select Speaker" menu, the sound settings will be limited.

	TV's Internal Speakers	Audio Out (Optical) to Sound System
	RF / AV / S-Video / Component / PC / HDMI	RF / AV / S-Video / Component / PC / HDMI
TV Speaker	Speaker Output	Sound Output
External Speaker	Mute	Sound Output
Video No Signal	Mute	Mute

❑ Sound Select

When the PIP feature is activated, you can listen to the sound of the sub (PIP) picture.

- Main: Used to listen to the sound of the main picture.
- Sub: Used to listen to the sound of the sub picture.
 - 🔊 Press the **TOOLS** button to display "Tools" menu. You can also set the sound of the sub picture by selecting "Tools → PIP → Sound Select".

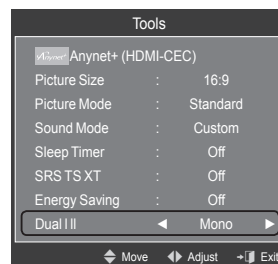
❑ Sound Reset

- Reset All / Reset Sound Mode / Cancel: You can restore the Sound settings to the factory defaults.

Selecting the Sound Mode

You can set the sound mode in the "Tools" menu. When you set to "Dual I II", the current sound mode is displayed on the screen.

	Audio Type	Dual 1 / 2	Default
A2 Stereo	Mono	MONO	Automatic change
	Stereo	STEREO ↔ MONO	
	Dual	DUAL 1 ↔ DUAL 2	DUAL 1
NICAM Stereo	Mono	MONO	Automatic change
	Stereo	MONO ↔ STEREO	
	Dual	MONO ↔ DUAL 1 DUAL 2 ←	DUAL 1



- ☑ If the stereo signal is weak and an automatic switching occurs, then switch to the mono.
- ☑ This function is only activated in stereo sound signal. It is deactivated in mono sound signal.
- ☑ This function is only available in TV mode.

Function Description

Configuring the Setup Menu

❑ Child Lock → On / Off

This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programme by muting out video and audio.

- ☑ Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number.
- ☑ The default PIN number of a new TV set is "0-0-0-0". You can change the PIN by selecting "Change PIN" from the menu.
- ☑ You can lock some channels in Channel List. (refer to page 13)
- ☑ "Child Lock" is available only in TV mode.

❑ Change PIN

You can change your personal ID number that is required to set up the TV.

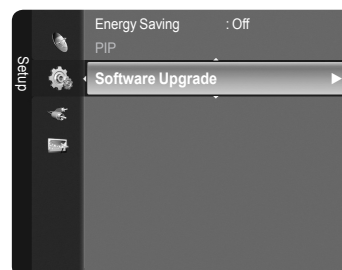
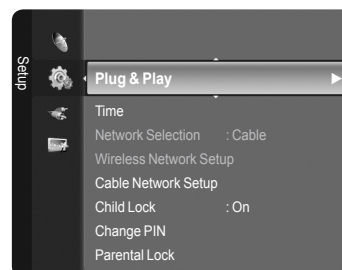
- ☑ Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number.
- ☑ The default PIN number of a new TV set is "0-0-0-0".
- ☑ If you forget the PIN code, press the remote control buttons in the following sequence, which resets the PIN to 0-0-0-0: POWER (Off), MUTE, 8, 2, 4, POWER (On).

❑ Parental Lock → Parental Rating

This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programme by a 4-digit PIN (Personal Identification Number) code that is defined by the user.

- In the 'Parental Rating' screen, configure the parental ratings.

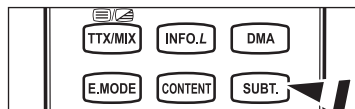
- ☑ Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number.
- ☑ The default PIN number of a new TV set is "0-0-0-0". You can change the PIN by selecting "Change PIN" from the menu.
- ☑ When the parental ratings are set, the "🔒" symbol is displayed.
- ☑ Allow All: Press to unlock all TV ratings.
Block All: Press to lock all TV ratings.



❑ Subtitle

You can activate and deactivate the subtitles. Use this menu to set the Subtitle Mode. "Normal" under the menu is the basic subtitle and "Hard of hearing" is the subtitle for a hearing-impaired person.

- Subtitle → On / Off: Switches subtitles on or off.
- Mode → Normal / Hard of hearing: Sets the subtitle mode.
- Subtitle Language: Set the subtitle language.
- ☑ If the programme you are watching does not support the "Hard of hearing" function, "Normal" automatically activates even though "Hard of hearing" mode is selected.
- ☑ English is the default in cases where the selected language is unavailable in the broadcast.
- 📄 You can select these options simply by pressing the **SUBT.** button on the remote control.



❑ Teletext Language

You can set the Teletext language by selecting the language type.

- ☑ English is the default in cases where the selected language is unavailable in the broadcast.

❑ Preference

- Primary Audio Language / Secondary Audio Language / Primary Subtitle Language / Secondary Subtitle Language / Primary Teletext Language / Secondary Teletext Language
- Using this feature, users can select one of the languages. The language selected here is the default when the user selects a channel.

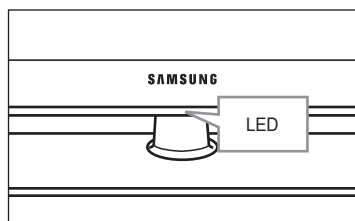
If you change the language setting, the Subtitle Language, Audio Language, and the Teletext Language of the Language menu are automatically changed to the selected language.

The Subtitle Language, Audio Language, and the Teletext Language of the Language menu show a list of languages supported by the current channel and the selection is highlighted. If you change this language setting, the new selection is only valid for the current channel. The changed setting does not change the setting of the Primary Subtitle Language, Primary Audio Language, or the Primary Teletext Language of the Preference menu.

❑ Light Effect

You can turn on/off the LED on the front of TV according to the situation. Use it for saving power or when the LED dazzles your eyes.

- Off: LED will not come on.
- In Standby: Turns the LED on in standby mode.
- Watching TV: Turns the LED on while watching TV.
- Always: LED is always on.
- ☑ Set the "Light Effect" to "Off" to reduce the power consumption.



❑ Melody

- Off / Low / Medium / High

The TV power on / off melody sound can be adjusted.

☑ The Melody does not play

- When no sound is output from the TV because the **MUTE** button has been pressed.
- When no sound is output from the TV because the volume (–) button has been pressed.
- When the TV is turned off by Sleep Timer function.

❑ Entertainment

The "Entertainment" mode enables you to select the optimal display and sound for sports, cinema and games.

- Off: Switches the "Entertainment" function off.
- Sports: Provides the optimal picture and sound quality for sports.
- Cinema: Provides the optimal picture and sound quality for movie watching. You can experience a richer picture and enhanced sound.
- Game: Provides the optimal picture and sound quality for games. This mode accelerates the playing speed when using an external game console connected to the TV.
- ☑ If you set any of the three "Entertainment" modes to On, the settings will be locked and can not be adjusted. In addition, Picture and Sound mode settings are not allowed. If you want to make Picture and Sound mode adjustments, the "Entertainment" mode must be turned off.
- ☑ If you set any of the three "Entertainment" modes to On, the sound and picture functions will be limited.
- ☑ The "Entertainment" settings are saved for each input source.
- ☑ This function is not available in PC mode
- 🔑 You can press the **E.MODE** button on the remote control repeatedly to change the "Entertainment" setting.



❑ Energy Saving

This feature adjusts the brightness of the TV in order to reduce power consumption. When watching TV at night, set the "Energy Saving" mode option to "High" to reduce eye fatigue as well as power consumption.

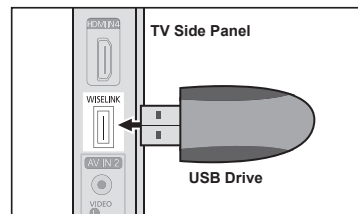
- Off: Turns off the energy saving function.
 - Low: Sets the TV to low energy saving mode.
 - Medium: Sets the TV to medium energy saving mode.
 - High: Sets the TV to high energy saving mode.
 - Auto: Automatically adjusts the brightness of the TV screen in accordance with the scenes.
- 🔑 Press the **TOOLS** button to display "Tools" menu. You can also set the Energy Saving option by selecting "Tools → Energy Saving".

❑ Software Upgrade

To keep your product up-to-date with new Digital Television features then software upgrades are periodically broadcast as part of the normal Television signal. It will automatically detect these signals and display the software upgrade banner. You are given the option to install the upgrade.

■ BY USB

Insert a USB drive containing the firmware upgrade into TV. Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete. When software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade.



■ BY Channel

Upgrades the software using the broadcasting signal.

■ Standby Mode Upgrade

To continue software upgrade with master power on, Select On by pressing the ▲ or ▼ button. 45 minutes after entering standby mode, a manual upgrade is automatically conducted. Since the power of the unit is turned on internally, the screen may be on slightly for the LCD product. This phenomenon may continue for more than 1 hour until the software upgrade is completed.

■ Alternative Software

To display the software version information.

Setting the Time

❑ Clock

Setting the clock is necessary in order to use the various timer features of the TV.

- ✎ The current time will appear every time you press the **INFO** button.
- ✎ If you disconnect the power cord, you have to set the clock again.

■ Clock Mode

You can set up the current time manually or automatically.

- Auto: Set the current time automatically using the time from the digital broadcast.
- Manual: Set the current time to a manually specified time.

■ Clock Set

You can set the current time manually.

- ✎ Set up this item when you have set "Clock Mode" to "Manual".
- ✎ You can set the day, month, year, hour and minute directly by pressing the number buttons on the remote control.

❑ Sleep Timer → Off / 30 / 60 / 90 / 120 / 150 / 180


The sleep timer automatically shuts off the TV after a preset time (30, 60, 90, 120, 150 and 180 minutes).

- ✎ The TV automatically switches to standby mode when the timer reaches 0.
- ✎ To cancel the "Sleep Timer" function, select "Off".

✎ Press the **TOOLS** button to display "Tools" menu. You can also set the sleep timer by selecting "Tools → Sleep Timer".

❑ Timer 1 / Timer 2 / Timer 3

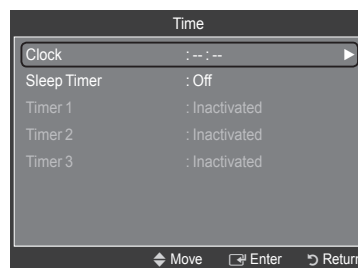
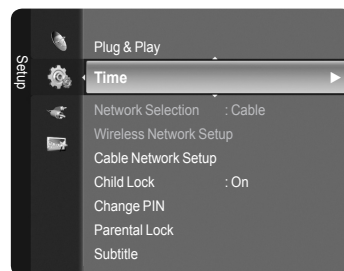
Three different on / off timer settings can be made.

- On Time: Set the hour, minute, and activate / inactivate.
(To activate timer with the setting you've chosen, set to "Activate".)
- Off Time: Set the hour, minute, and activate / inactivate.
(To activate timer with the setting you've chosen, set to "Activate".)
- Volume: Set the required volume level.
- Contents: When the "On Time" is active, you can turn on a specific channel or play back contents such as photo or audio files.
 - TV / USB: Select TV or USB. (Make sure that an USB device is connected to your TV.)
 - Antenna: Select ATV or DTV.
 - Channel: Select the desired channel.
 - Music: Select the folder containing MP3 files on the USB device.
 - Photo: Select the folder containing JPEG files on the USB device.
- Repeat: Select "Once", "Everyday", "Mon~Fri", "Mon~Sat", "Sat~Sun", or "Manual".
 - ✎ When "Manual" is selected, press the ► button to select the desired day of the week. Press the **ENTER**  button over the desired day and the ✓ mark will appear.
 - ✎ You must set the clock first.

- ✎ You can set the hour, minute and channel by pressing the number buttons on the remote control.

✎ Auto Power Off

When you set the timer On, the television will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by the timer. This function is only available in timer On mode and prevents overheating, which may occur if a TV is on for too long time.

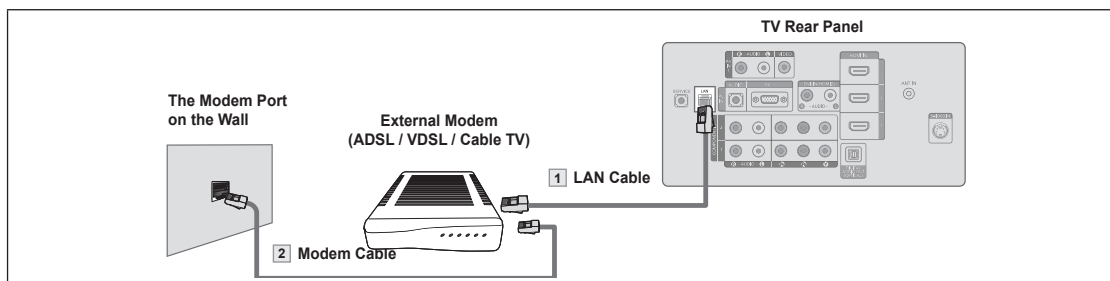


Network Connection

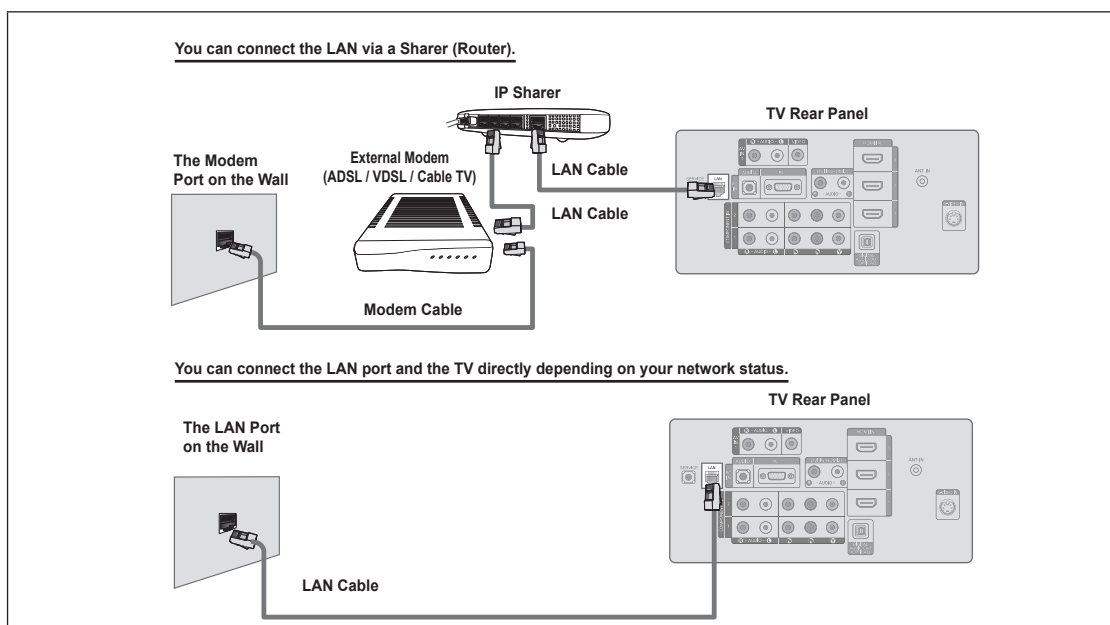
Network Connection - Cable

■ Cable Connection for a DHCP Environment

The procedures to set up the network using Dynamic Host Configuration Protocol (DHCP) are described below. Since an IP address, subnet mask, gateway, and DNS are automatically allocated when DHCP is selected, you do not have to enter them manually.



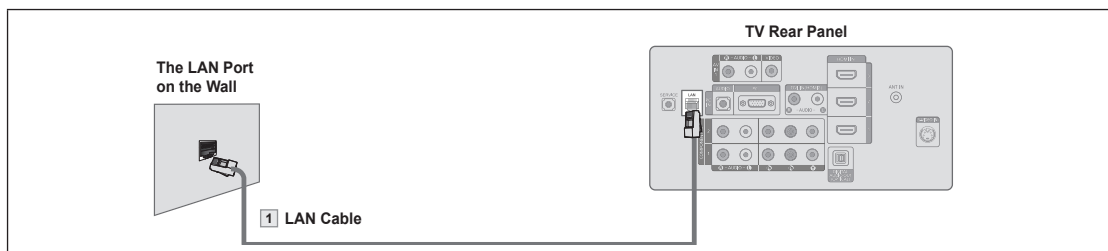
1. Connect the [LAN] port on the rear panel of the TV and the external modem with a LAN Cable.
2. Connect the LAN port on the wall and the external modem with a Modem Cable.



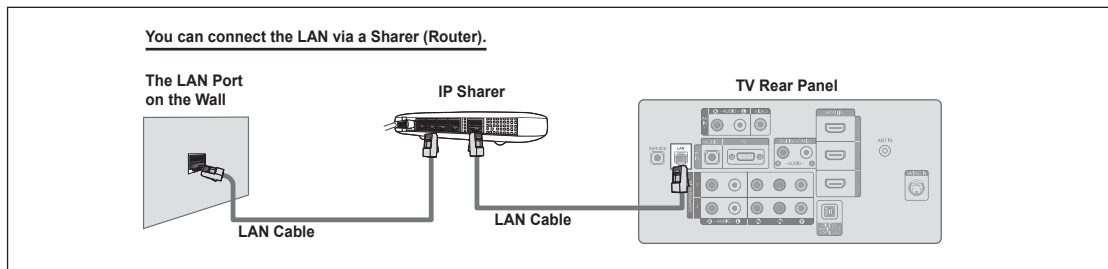
- ☑ The terminals (the position of the port and the type) of the external device may differ depending on the manufacturer.
- ☑ If the IP address allocation by the DHCP server has failed, turn the external modem off, turn it on again after at least 10 seconds and then try again.
- ☑ For the connections between the external modem and the Sharer (Router), refer to the owner's manual of the corresponding product.
- ☑ You can connect the TV to the LAN directly without connecting it through a Sharer (Router).
- ☑ You cannot use a manual-connection-type ADSL modem because it does not support DHCP. You have to use an automatic-connection-type ADSL modem.

■ LAN Connection for Static IP Environment

The procedures to set up the network using a static IP address are described below. You have to manually enter the IP address, subnet mask, gateway, and DNS that are provided by your Internet Service Provider (ISP).



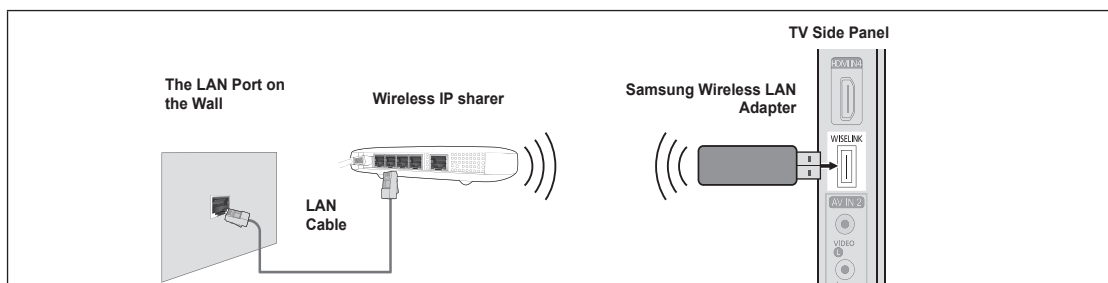
1. Connect the [LAN] port on the rear panel of the TV and the LAN port on the wall using the LAN cable.



- ☑ The terminals (the position of the port and the type) of the external device may differ depending on the manufacturer.
- ☑ If you are using a static IP address, your ISP will inform you of the IP address, subnet mask, gateway, and DNS. You must enter these values to complete the network settings. If you do not know the values, ask your network administrator.
- ☑ For the information on how to configure and connect a Sharer (Router), refer to the owner's manual for the corresponding product.
- ☑ You can connect the TV to the LAN directly without connecting it through a Sharer (Router).
- ☑ If you use an IP Sharer (IP Router) that supports DHCP, you can set up the device as either DHCP or static IP.
- ☑ For the procedures to use a static IP address, ask your Internet Service Provider.

Network Connection - Wireless

You can connect to the network wirelessly through a wireless IP sharer.



1. Connect the 'Samsung Wireless LAN Adapter' into the Wiselink terminal of the TV.
 - ☑ You must use the 'Samsung Wireless LAN Adapter'(WIS-08BG) to use a wireless network.
 - ☑ The 'Samsung Wireless LAN Adapter' is sold separately. Contact a Samsung Electronics agent or service center for purchasing.
 - ☑ To use a wireless network, your TV must be connected to a wireless IP sharer.
 - ☑ If the wireless IP sharer supports DHCP, you TV can use a DHCP or static IP address to connect to the wireless network.
 - ☑ You must use a wireless IP sharer that supports IEEE 802.11 B or IEEE 802.11G.
 - ☑ If the wireless IP sharer allows you to turn on / off the Ping connection function, turn it on.
 - ☑ Set the wireless IP sharer to Infrastructure mode. Ad-hoc mode is not supported.
 - ☑ Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communications may fail.
 - ☑ When applying the security key for the AP (wireless IP sharer), only the following is supported.
 - 1) Authentication Mode : WEP, WPA2PSK, WPA2PSK
 - 2) Encryption Type : WEP, TKIP, AES
 If you apply a security system other than the systems listed above, it will not work with the TV.

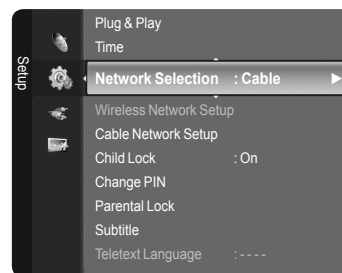
Network Setup

❑ Network Selection

Select Cable or Wireless as the method to connect to the network.

☑ The menu is activated only if the 'Samsung Wireless LAN Adapter' is connected. (See page 26)

- Cable: Connect to network using a cable.
- Wireless: Connect to network wirelessly.



❑ Cable Network Setup

- Internet Protocol Setup → Auto / Manual
- Network Test: You can test or confirm the network connection status after setting up the network.

☑ When unable to connect to a wired network

If your Internet service provider has registered the MAC address of the device used to connect to the Internet for the first time and authenticates the MAC address each time you connect to the Internet, your TV may not be able to connect to the Internet as the MAC address differs from that of the device (PC) used to connect to the Internet the first time. In this case, ask your Internet service provider about the procedures to connect devices other than your PC (such as your TV) to the Internet. If your Internet service provider requires an ID or password to connect to the Internet (network), your TV may not be able to connect to the Internet. In this case, you have to enter your ID or password when connecting to the Internet using an Internet Sharer (Router).

The internet connection may fail due to a firewall problem. In this case, contact your Internet service provider. If you cannot connect to the Internet even if you have followed the procedures of your Internet service provider, please contact a Samsung Electronics Service Center.

❑ Wireless Network Setup

- Internet Protocol Setup → Auto / Manual
- Network Test: You can test or confirm the network connection status after setting up the network.

☑ When unable to connect to a wireless network

Your TV may fail to locate an AP that is configured as a private SSID type. In this case, please change the AP settings and try again. If your Internet service provider has registered the MAC address of the device used to connect to the Internet for the first time and authenticates the MAC address each time you connect to the Internet, your TV may not be able to connect to the Internet as the MAC address differs from that of the device (PC) used to connect to the Internet the first time. In this case, ask your Internet service provider about the procedures to connect devices other than your PC (such as your TV) to the Internet. If you cannot connect to the Internet even if you have followed the procedures of your Internet service provider, please contact a Samsung Electronics Service Center.

- Select Access Point: You can select the IP sharer to use when using a wireless network.
 - ☑ If a wireless Access Point is not in the Access Point list, press the Red button.
 - ☑ When the connection is made, you will be returned to the screen automatically.
 - ☑ If you selected an Access Point that requires security authentication, enter the security key.
 - The Security Key input screen appears.
 - Enter the security key and press the **ENTER** button.
 - Using the Remote Control Buttons on the Security Key Input Screen.

Cable Network Setup-Auto

If you connect the LAN cable and it supports DHCP, the Internet Protocol (IP) Settings are automatically configured. Please check if the LAN cable is connected. (See page 25)

1. Set "Network Selection" to "Cable".
2. Select "Cable Network Setup".
3. Set "Internet Protocol Setup" to "Auto".
4. Select "Network Test" to check the network connectivity.

Cable Network Setup-Manual

To connect the TV to the LAN using a static IP address, you must set up the Internet Protocol (IP). Please check if the LAN cable is connected. (See page 26)

1. Set "Network Selection" to "Cable".
2. Select "Cable Network Setup".
3. Set "Internet Protocol Setup" to "Manual".
4. Set up "IP Address", "Subnet Mask", "Gateway" and "DNS Server".
 - ☑ Press the number buttons on the remote control when you set the Network manually.
5. Select "Network Test" to check the network connectivity.
 - ☑ When you run the Network Test after the Cable Network Setup, the result can differ depending on local LAN speed.
 - ex) Retry the Network Test in 40 ~ 50 seconds after Gateway Ping Error happens.

Wireless Network Setup-Auto

The menu is activated only if the 'Samsung Wireless LAN Adapter' is connected. (See page 26)

If you connect the LAN cable and it supports DHCP, the Internet Protocol (IP) Settings are automatically configured. The wireless IP sharer to be connected to this product must support DHCP.

1. Set "Network Selection" to "Wireless".
2. Select "Wireless Network Setup".
3. Set "Internet Protocol Setup" to "Auto".
4. Select an AP through "Select Access Point".
5. Select "Network Test" to check the network connectivity.

Wireless Network Setup-Manual

The menu is activated only if the 'Samsung Wireless LAN Adapter' is connected. (See page 26)

1. Set "Network Selection" to "Wireless".
2. Select "Wireless Network Setup".
3. Set "Internet Protocol Setup" to "Manual".
4. Select an AP through "Select Access Point".
5. Select "Network Test" to check the network connectivity.

Source List / Edit Name

Source List

Use to select TV or other external input sources such as DVD players or Cable Box / Satellite receivers (Set-Top Box) connected to the TV. Use to select the input source of your choice.

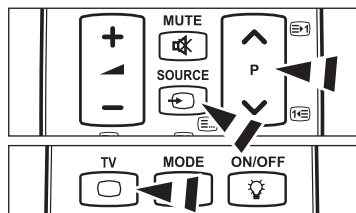
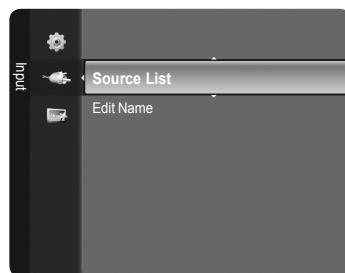
- TV, AV1, AV2, S-Video, Component1, Component2, PC, HDMI1, HDMI2 / DVI, HDMI3, HDMI4, USB, DLNA.

☑ You can choose only those external devices that are connected to the TV. In the "Source List", connected inputs will be highlighted and sorted to the top. Inputs that are not connected will be sorted to the bottom.

Using the Colour buttons on the remote with the Source list

- **Red** (Refresh): Refreshes the connecting external devices.
- **TOOLS** (Option): Displays the "Edit Name" and "Information" menus.

☑ Press the **SOURCE** button on the remote control to view an external signal source. TV mode can be selected by pressing the **TV** button, number buttons (**0~9**), and the **P** \wedge / \vee button on the remote control.



Edit Name

- VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / TV / IPTV / Blu-ray / HD DVD / DMA

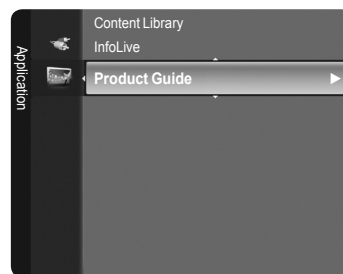
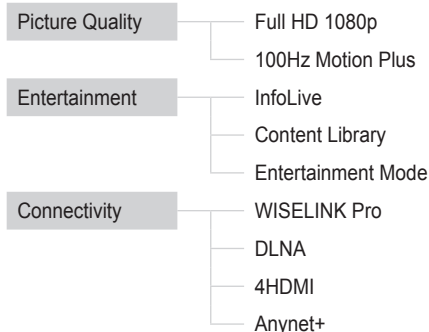
Name the device connected to the input jacks to make your input source selection easier.

☑ When a PC with a resolution of 1920 x 1080@60Hz is connected to the **HDMI IN 2** port, you should set the "HDMI2 / DVI" mode to "PC" in the "Edit Name" of the "Input" mode.

Product Guide

The Product Guide gives you information on the most important features of this TV.

1. Press the **MENU** button to display the menu. Press the **▲** or **▼** button to select "Application", then press the **ENTER** button.
2. Press the **▲** or **▼** button to select "Product Guide", then press the **ENTER** button.
3. Press the **◀** or **▶** button to select a Guide ("Picture Quality", "Entertainment" or "Connectivity") and press the **ENTER** button.
4. You can navigate the Product Guide screen by using the **◀** and **▶** buttons.



5. Press the **EXIT** button to exit.

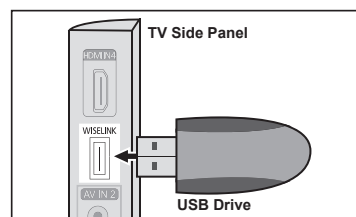
Using the Remote Control Button in Product Guide Menu

Button	Operations
Yellow Button	Shows the contents of the Product Guide sequentially. (AutoPlay)
Wheel (◀/▶)	Move the cursor and select an item.
ENTER	Select the currently selected item.
RETURN	Return to the previous menu.
EXIT	Stop the current function and return to the "Product Guide" main menu.

WISELINK Pro

Connecting a USB Device

1. Press the **POWER** button to turn the TV on.
2. Connect a USB device containing photo, music and/or movie files to the WISELINK jack (USB jack) on the side of the TV.
 - ☑ If you enter the WISELINK Pro mode with no USB device connected the message 'No external storage device found. Check the connection status.' will appear. In this case, insert the USB device, exit the screen by pressing the **W.LINK** button on the remote control and enter the WISELINK Pro screen again.
 - ☑ MTP (Media Transfer Protocol) is not supported.
 - ☑ The file system only supports FAT16/32 (The NTFS file system is not supported).
 - ☑ Certain types of USB Digital camera and audio devices may not be compatible with this TV.
 - ☑ WISELINK Pro only supports USB Mass Storage Class devices (MSC). MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Readers (Both USB HDD and HUB are not supported.)
 - ☑ Please connect directly to the USB port of your TV. If you are using a separate cable connection, there may be a USB compatibility problem.



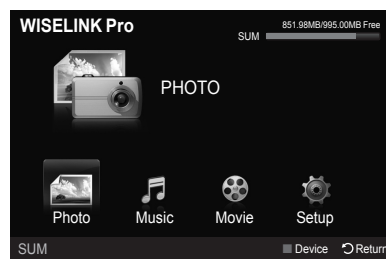
- ☑ Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- ☑ Do not disconnect the USB device while it is loading.
- ☑ MSC supports MP3 and JPEG files, while a PTP device supports JPEG files only.
- ☑ The sequential JPEG format is supported.
- ☑ The higher the resolution of the image, the longer it takes to display on the screen.
- ☑ The maximum supported JPEG resolution is 15360X8640 pixels.
- ☑ For unsupported or corrupted files, the 'Not Supported File Format' message is displayed.
- ☑ If the number of photo files exceeds 4000 (or the number of music files exceeds 3000), any files exceeding the 4000 limit may not be displayed in the Photo List (or Music List).
- ☑ MP3 files with DRM that have been downloaded from a non-free site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation of content, the distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.
- ☑ When moving to a photo, loading may take a few seconds. At this point, the loading icon will appear at the screen.

Using the WISELINK Pro Function

This function enables you to view and listen to photo, music and/or movie files saved on a USB Mass Storage Class (MSC) device.

Entering the WISELINK Pro Menu

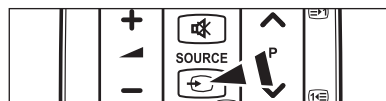
1. Press the **MENU** button. Press the **▲** or **▼** button to select "Application", then press the **ENTER** button.
 2. Press the **▲** or **▼** button to select "WISELINK Pro", then press the **ENTER** button.
- ☑ The "WISELINK Pro" menu is displayed.



3. Press the **W.LINK** button on the remote control to display the "WISELINK Pro" menu.



4. Press the **SOURCE** button on the remote control repeatedly to select "USB", then press the **ENTER** button.



3. Press the Red button, then press the **▲** or **▼** button to select the corresponding USB Memory Device (i.e. if connected through a hub). Press the **ENTER** button.
- ☑ This function differs depending on the USB Memory Device / DLNA device connected to TV.
- ☑ The selected USB device name appears at the bottom left of the screen.
4. Press the **◀** or **▶** button to select an icon (Photo, Music, Movie, Setup), then press the **ENTER** button. To exit "WISELINK Pro" mode, press the **W.LINK** button on the remote control.

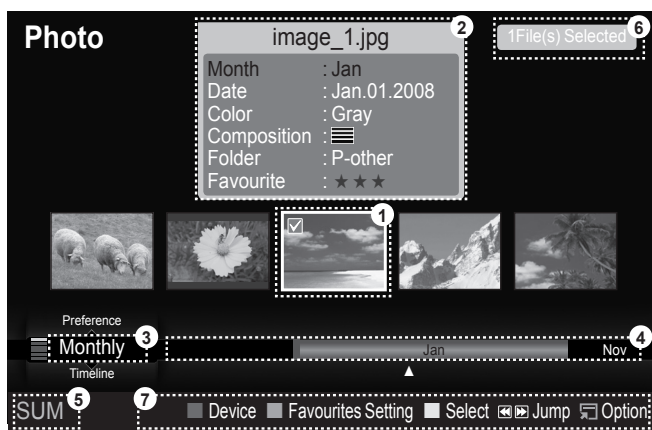
Removing a USB Memory Device Safely

You can remove the device safely from the TV.

1. Press the **TOOLS** button in the WISELINK Pro file list screen, or while a Slide Show, music or movie file is being played.
2. Press the **▲** or **▼** button to select "Remove Safely", then press the **ENTER** button.
3. Remove the USB device from the TV.



Screen Display



1. Currently selected file: The currently selected file is highlighted. Photo and movie files are displayed as thumbnail images.
2. Information Window: Shows information about the currently selected file. There is a separate information window for photo and movie files only. For music files, the file information is also displayed in the location where the file is displayed.
3. Current Sort Standard: This field shows the current standard for sorting files. Press the ▲ or ▼ button to change the standard for sorting files.
4. View Groups: Shows the sorting groups. The sorting group including the currently selected photo is highlighted.
5. Current Device: Shows the currently selected device name. Press the Red button to select a device.
6. Item Selection Information: Shows the number of photos that are selected by pressing the Yellow button.
7. Help Items

- **Red** (Device) button: Selects a connected device.
- **Green** (Favourites Setting) button: Changes the favourites setting for the selected file. Press this button repeatedly until the desired value appears.
- **Yellow** (Select) button: Selects file from the file list. Selected files are marked with a symbol ✓. Press the yellow button again to cancel a file selection.
- **Left/Right** (Jump) button: Jumps to the previous sorting group/Jumps to the next sorting group.
- **TOOLS** (Option) button: Displays the option menus. (The option menu changes according to the current status.)

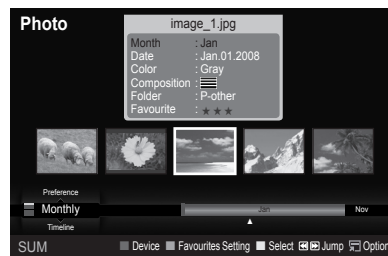
Using the Remote Control Button in WISELINK Pro Menu

Button	Operations
▲/▼/◀/▶/wheel	Move the cursor and select an item.
ENTER	Select the currently selected item. While playing a slide show, movie, or music file: - Pressing the ENTER button during play pauses the play. - Pressing the ENTER button during pause resumes the play.
▶/	Play or pause the slide show, music or movie.
RETURN	Return to the previous menu.
TOOLS	Run various functions from the photo, music and movie menus.
■	Stop the current slide show, music or movie file.
◀◀/▶▶	Jump to previous group/Jump to next group.
INFO	Show file information.
W.LINK	Exit WISELINK Pro mode.
P ▼/▲, PRE-CH	Stop WISELINK Pro mode and Returns to TV mode.
EXIT	Stop the current function and return to the WISELINK Pro main menu.

Using and Sorting Photo List

You can sort photos in the Photo List by a particular standard.

1. Press the ▲ or ▼ button to select a sorting standard in the Photo list.
 - ☑ The photos are sorted according to the newly selected sorting standard.
 - ☑ To move to the previous/next group, press the ◀ (REW) or ▶ (FF) button.
2. Press the ▶ (Play)/ENTER button to start the Slide Show in the order selected by the user.
 - ☑ The information of a photo file is automatically set.
 - ☑ The “Color” and “Composition” information extracted from a photo file may be different from the user’s expectations.
 - ☑ Photo information is automatically set. You can change the “Color”, “Composition”, and “Favourite”.
 - ☑ Photos for which information cannot be displayed are set as “Unclassified”.
 - ☑ PTP does not support folder sort mode.



Sorting Standard for the Photo List

- Monthly
It sorts and shows photos in the file by month. It sorts only by month (from January to December) regardless of year.
- Timeline
It sorts and shows photos by date. It sorts by year and month from the earliest photo.
- Color
It Sorts photos by color. You can change the photo color information.
 - ☑ “Color” options: Red, Yellow, Green, Blue, Magenta, Black, Gray, Unclassified.
- Composition
It Sorts photos by composition. You can change the compositional information of photos.
 - ☑ “Composition” options: [horizontal icon] (horizontal), [vertical icon] (vertical), [object icon] (object), [perspective icon] (perspective), [pattern icon] (pattern), Unclassified.
- Folder
It Sorts photos by folder. If there are many folders in USB, the photos files are shown in order in each folder. The photo file in the Root folder is shown first and the others are shown in alphabetical order by name.
- Preference
It Sorts photos by preference (Favourite). You can change the photo preferences.
 - ☑ **Changing the Favourites setting**
Select the desired photo in the Photo list, then press the Green button repeatedly until the desired setting appears.
 - ☑ “Favourite” options: [1 star icon], [2 stars icon], [3 stars icon], [4 stars icon]

Photo List Option Menu

- Slide Show
Using this menu, you can play a Slide Show using the photo files on the USB memory device.
- Play Current Group
Using this menu, you can play a Slide Show using only the photo files in the currently selected sorting group.
- Delete
Using this menu, you can delete the selected photo files.
- Change Group
You can change the “Color” and “Composition” information of photo files.
 - ☑ The group information of the current file is updated and the file is moved to the new group.
 - ☑ To change the information of multiple files, select the files you want by pressing the yellow button.



Information

The photo file information including the name, the size, the resolution, the date modified and the path is displayed.

✓ You can view the information of photo files during a SlideShow using the same procedures.

📄 Alternatively, select a photo from the photo list and press the **INFO** button to view the information.



Remove Safely

You can remove the device safely from the TV.

Viewing a Photo or Slide Show

Viewing a Slide Show

1. Press the ◀ or ▶ button to select the desired photo in the Photo list.

2. Press the **TOOLS** button.

3. Press the ▲ or ▼ button to select "Slide Show", then press the **ENTER** button.

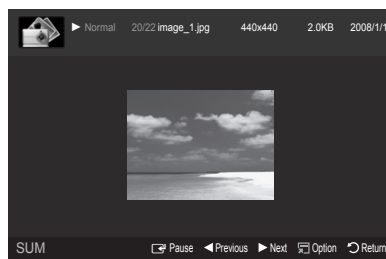
✓ All files in the photo list will be used for the Slide Show.

✓ During the slide show, files are displayed in order from the currently shown file.

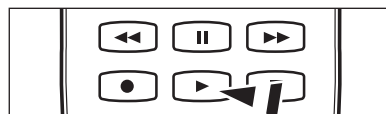
✓ The Slide Show progresses in the order sorted in the Photo list.

✓ Music files can be automatically played during the Slide Show if the "Background Music" is set to "On". (Refer to page 34).

📄 While a photo list is displayed, press the ▶(Play)/**ENTER** button on the remote control to start slide show.



Slide Show Control Buttons



ENTER	Play/Pauses the Slide Show.		Exit Slide Show and return to the photo list.
	Play the Slide Show.	TOOLS	Run various functions from the Photo menus.
	Pause the Slide Show.		Change the Slide Show playing speed.

Playing current group

1. Press the ▲ or ▼ button to select a sorting standard. ("Monthly", "Timeline", "Color", "Composition", "Folder", "Preference")

2. Press the ◀ (REW) or ▶ (FF) button to select the desired group.

3. Press the **TOOLS** button.

4. Press the ▲ or ▼ button to select "Play Current Group", then press the **ENTER** button.

✓ Only the photos in the sorting group including the selected files will be used for the Slide Show.

To perform a Slide Show with only the selected files

1. Press the ◀ or ▶ button to select the desired photo in the Photo list.

2. Press the yellow button. Repeat the above operation to select multiple photos.

✓ The ✓ mark appears to the left of the selected photo.

✓ If you select one file, the SlideShow will not be performed.

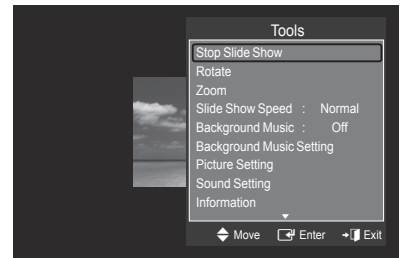
✓ To deselect all selected files, press the **TOOLS** button and select "Deselect All".

3. Press the ▶ (Play)/**ENTER** button.

📄 The selected files will be used for the Slide Show.

Slide Show Option Menu

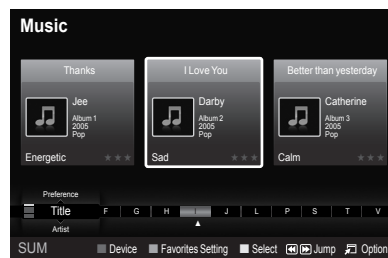
- Stop Slide Show/Start Slide Show
You can start or stop a Slide Show.
- Rotate
You can rotate photos saved on a USB memory device.
 - ☑ Whenever you press the ◀ button, it rotates by 270°, 180°, 90°, and 0°.
 - ☑ Whenever you press the ▶ button, it rotates by 90°, 180°, 270°, and 0°.
 - ☑ If you have select "Zoom", the "Rotate" deactivated.
- Zoom
You can magnify photos saved on a USB memory device. (x1 → x2 → x4)
 - ☑ To move the enlarged photo image, press the **ENTER** button, then press the ▲/▼/◀/▶ buttons. Note that when the enlarged picture is smaller than the original screen size, the location change function doesn't work.
 - ☑ The enlarged file is not saved.
- Slide Show Speed
You can select the slide show speed.
 - ☑ You can select the Slide Show speed only during a slide show.
 - ☑ You can also change the speed of the Slide Show by pressing the ◀◀ (REW) or ▶▶ (FF) button during the Slide Show.
- Background Music → On/Off
If you set "Background Music" to On, the background music will be played when viewing photos one by one or in a Slide Show.
If you set "Background Music" to On, a screen appears immediately where you can set the Background Music.
To use this feature, there must be music and photo files stored on the USB device.
- Background Music Setting
You can select background music when watching a SlideShow.
 - ☑ If you turn off the "Background Music", even if the "Background Music Settings" have been set up, the background music will not be played.
 - ☑ Loading music files is needed to change BGM mode. Play music files in music category to load.
 - BGM Mode → Mood/Selected File/Shuffle
 - BGM Mood → Energetic/Rhythmical/Sad/Exciting/Calm
 - ☑ If you set "BGM Mode" to "Mood", you can select a mood.
 - ☑ You cannot select a mood not part of the music files on the USB memory device.
 - Select Music File
 - ☑ If you set "BGM Mode" to "Selected File", you can select a music file.
- Picture Setting/Sound Setting
Refer to page 40.
- Information
The photo file information is displayed.
- Remove Safely
You can remove the device safely from the TV.



Using and Sorting the Music List

You can sort music files in the Music List by a particular standard.

- Press the ▲ or ▼ button to select a sorting standard in the Music list.
 - ☑ Music files are sorted according to the newly selected sorting standard.
 - ☑ To move to the previous/next group, press the ◀ (REW) or ▶ (FF) button.
- Press the ENTER button to start playing music in the order selected by the user.
 - ☑ The information of the music files is automatically set.
 - ☑ The "Mood" information extracted from a music file may differ from the expectations of the user.
 - ☑ Music information is automatically set. You can change the "Mood" and "Favourite".
 - ☑ Music files for which information cannot be displayed are set to "Unclassified".
 - ☑ If there is no title information for a music file, the filename is displayed.
 - ☑ If no information is available for the Genre, Artist, Album, or Year, the corresponding item is displayed as blank.
 - ☑ If the sound is odd when playing MP3 files, exit WISELINK mode and adjust the "Equalizer" and "SRS TruSurround XT" in the Sound menu. (An over-modulated MP3 file may cause a sound problem.)

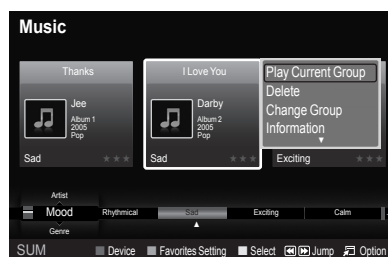


Sorting Standard for the Music List

- Title: It sorts the Music titles in symbol/Number/alphabet/special order, and shows the music file.
- Artist: It sorts the music file by artist in symbol/Number/alphabet/special order.
- Mood: It sorts music files by the mood. You can change the music mood information.
 - ☑ "Mood" options: Energetic, Rhythmical, Sad, Exciting, Calm, Unclassified
- Genre: It sorts music files by the genre.
- Folder: It sorts music files by the folder. If there are many folders in USB, the files are shown in order in each folder. The music file in the Root folder is shown first and the others are shown in alphabetical order by name.
- Preference: It sorts music files by preference (Favourite). You can change the music files preferences.
 - ☑ Changing the Favourites setting
Select the desired music file in the Music list, then press the Green button repeatedly until the desired setting appears.
 - ☑ To change the information of multiple files, select files by pressing the yellow button.
 - ☑ "Favourite" options: ★☆☆, ★★☆☆, ★★★☆☆, ★★★★★

Music List Option Menu

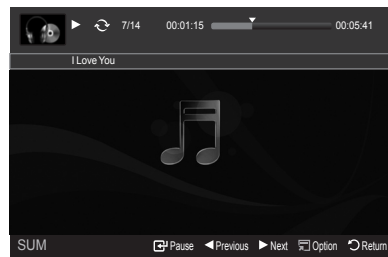
- Play Current Group: Using this menu, you can only play music files in the currently selected sorting group.
- Delete: Using this menu, you can delete the selected music files.
- Change Group: You can change the mood information of music files. The group information of the current file is updated and the file is moved to the new group.
 - ☑ To change the information of multiple files, select files by pressing the yellow button.
- Information: The music file information including the name, the size, the date modified and the path is displayed.
 - ☑ You can view the information of music files during a SlideShow using the same procedures.
 - ☑ Alternatively, select a music file from the music list and press the INFO button to view the information.
- Remove Safely: You can remove the device safely from the TV.



Playing a Music

Playing a music file

- Pressing the ◀ or ▶ button to select a music file to be played.
- Press the ▶ (Play)/ENTER button.
 - This menu only shows files with the MP3 file extension. Files with other file extensions are not displayed, even if they are saved on the same USB device.
 - ◀ (REW) or ▶ (FF) buttons do not function during play.
 - The selected file is displayed at the top with its playing time.
 - To adjust the music volume, press the volume button on the remote control. To mute the sound, press the **MUTE** button on the remote control.
 - The playing duration of a music file may be displayed as '00:00:00' if its playing time information is not found at the start of the file.



Music Play Control Buttons

ENTER	Play/Pauses the music file.	■	Exit play mode and return to the music list.
▶	Play the music file	TOOLS	Run various functions from the Music menus.
⏸	Pause the music file		

Music function information icon

↺↻	When all music files in the folder (or the selected file) are repeated. "Repeat Mode" is "On".
↻	When all music files in the folder (or the selected file) are played once. "Repeat Mode" is "Off".

Playing the music group

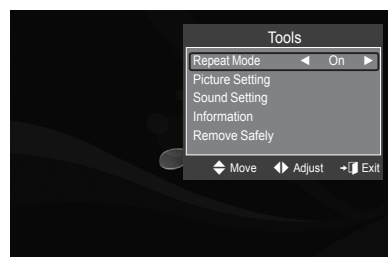
- Press the ▲ or ▼ button to select a sorting standard.
(“Title”, “Artist”, “Mood”, “Genre”, “Folder”, “Preference”)
- Press the ◀ (REW) or ▶ (FF) button to select the desired group.
- Press the **TOOLS** button.
- Press the ▲ or ▼ button to select “Play Current Group”, then press the ENTER button.
 - The music files in the sorting group including the selected file are played.

Playing the selected music files

- Press the ◀ or ▶ button to select the desired music file in the music list.
- Press the yellow button. Repeat the above operation to select multiple music files.
 - The ✓ mark appears to the left of the selected music file.
- Press the ▶ (Play)/ENTER button.
 - Only the selected file is played.

Music Play Option Menu

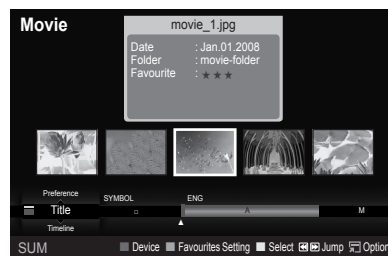
- Repeat Mode → On/Off
You can play music files repeatedly.
- Picture Setting/Sound Setting
Refer to page 40.
- Information
The music file information is displayed.
- Remove Safely
You can remove the device safely from the TV.



Using and Sorting the Movie List

You can sort movies in the Movie List by a particular standard.

1. Press the ▲ or ▼ button to select a sorting standard in the Movie list.
 - ☑ The movie files are sorted according to the newly selected sorting standard.
 - ☑ To move to the previous/next group, press the ◀ (REW) or ▶ (FF) button.
2. Press the ▶ (Play)/ENTER button to play the movie in the order selected by the user.
 - ☑ The movies are sorted according to the newly selected sorting standard.
 - ☑ Movie information is automatically set. You can change the "Favorite".

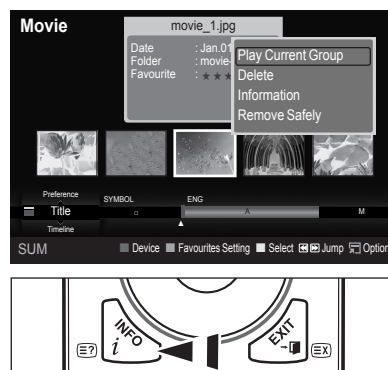


Sorting Standard for the Movie List

- Title
It sorts and displays the Movie titles in symbol/Number/alphabet/special order.
- Timeline
It sorts and shows movies by date. It sorts by year and month from the earliest movie.
- Folder
If there are many folders in USB, the movies files are shown in order in each folder. The movie file in the Root folder is shown first and the others are shown in alphabetical order by name.
- Preference
It sorts movies by preference. (Favorite) You can change the movie preferences.
 - ☑ **Changing the Favourites setting**
Select the desired movie file in the movie list, then press the Green button repeatedly until the desired setting appears.
 - ☑ "Favourite" options: ☆☆☆, ☆☆☆, ☆☆☆, ☆☆☆

Movie List Option Menu

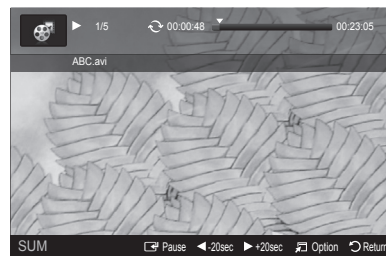
- Play Current Group
Using this menu, you can only play movie files in the currently selected sorting group.
- Delete
Using this menu, you can delete the selected movie files.
- Information
The movie file information including the name, the size, the date modified and the path is displayed.
 - ☑ Alternatively, select a movie file from the movie list and press the INFO button to view the information.
- Remove Safely
You can remove the device safely from the TV.



Playing a Movie File

Playing a movie file

- Pressing the ◀ or ▶ button to select a movie to be played,
- Press the ▶ (Play)/ENTER button.
 - The selected file is played.
 - The selected file is displayed at the top with its playing time.
 - The playing duration of a movie file may be displayed as '00:00:00' if its playing time information is not found at the start of the file.
 - You can watch exciting gaming multimedia files, but the gaming function is not supported.
 - Movie doesn't support subtitles. (for example, not support smi, srt and sub files, etc and not support subtitles included in movie files)



Supported Video Formats

Container Type	Video Codec			Audio codec
	Video Codec Type	Resolution (Max)	Frame Rate	
avi	XviD	720 x 576	24/25/30	AC3, MPEG1 (Layer 1, 2, 3), PCM
	MPEG2	720 x 576		
	H.264 HP	1920 x 1088		
	MPEG-4 ASP	720 x 576		
mp4	H.264 HP	1920 x 1088	24/25/30	ADPCM (MS, IMA), AAC LC
	MPEG-4 ASP	720 x 576	24/25/30	
PS	MPEG2	1920 x 1088	24/25/30	AC3, MPEG1 (Layer 1, 2, 3), LPCM
TS	MPEG2	1920 x 1088	24/25/30	AC3, MPEG1 (Layer 1, 2, 3), LPCM

Video Play Control Buttons

ENTER	Play/Pause the movie file.
▶	Play the movie file.
⏸	Pause the movie file.
■	Exit play mode and return to the movie list.
TOOLS	Run various functions from the movie menus.
◀/▶	Skip forwards or backwards through the movie file in 20 second intervals.
▲/▼	Move the file being played first or last.

Movie function information icon

🔄	When all movie files in the folder (or the selected file) are repeated. "Repeat Mode" is "On".
🔄	When all movie files in the folder (or the selected file) are played once. "Repeat Mode" is "Off".

Playing the movie group

- Press the ▲ or ▼ button to select a sorting standard. ("Title", "Timeline", "Folder", "Preference")
- Press the ◀ (REW) or ▶ (FF) button to select the desired group.
- Press the TOOLS button.
- Press the ▲ or ▼ button to select "Play Current Group", then press the ENTER button.

Playing the selected movie files

1. Press the ◀ or ▶ button to select the desired movie file in the movie list.
2. Press the yellow button. Repeat the above operation to select multiple movie files.
 - ☑ The ✓ mark appears to the left of the selected movie file.
3. Press the ▶ (Play)/ENTER button.
 - ☑ Only the selected file is played.

Playing movie continuously

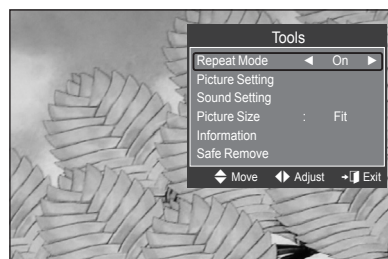
If you exit playing movie, playing it continuously later is possible.

With "Play continuously" function, you can watch movie without watching again from beginning or bothering searching.

1. Select movie file you want to Play continuously by pressing ◀ or ▶ button from the Movie List.
2. Press the ▶ (Play)/ENTER button.
3. Select play continuously by pressing Blue button.
 - ☑ Movie will begin to play from where it was stopped being played.
 - ☑ If "Cont. movie play help" function was set "On", a pop-up message will appear when you play movie file you want to Play continuously. (Refer to page 40)
4. To exit "WISELINK Pro" mode, press the **W.LINK** button on the remote control.

Movie Play Option Menu

- Repeat Mode
You can play the movie repeatedly.
- Picture Setting/Sound Setting
Refer to page 40.
- Picture Size
 - Fit: Play video at the TV screen size.
 - Original: Play video at the original size.
- Information
The movie file information is displayed.
- Remove Safely
You can remove the device safely from the TV.



Deleting the Photo/Music/Movie File

1. Press the ◀ or ▶ button to select the desired file in the Photo/Music/Movie list.
 - ☑ To delete multiple files, select files by pressing the yellow button.
2. Press the **TOOLS** button.
3. Press the ▲ or ▼ button to select "Delete" (or "Delete selected File"), then press the ENTER button.
4. Press the ◀ or ▶ button to select "OK", then press the ENTER button.
 - ☑ The file is deleted.
 - ☑ When a read-only file is deleted, the "This File is read-only file. Delete it?" message appear.
 - ☑ Read-only files among multiple files cannot be deleted.
 - ☑ If you select "Cancel", the deletion is cancelled.
 - ☑ While removing files, don't remove the USB memory device.
 - ☑ You cannot remove the PTP-connected digital camera picture files.
 - ☑ You cannot recover deleted Photo/music/movie files.

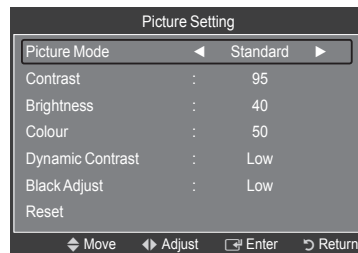


Picture/Music Settings Using WISELINK Pro

While a Slide Show, music or movie is being played, you can set the picture and sound.

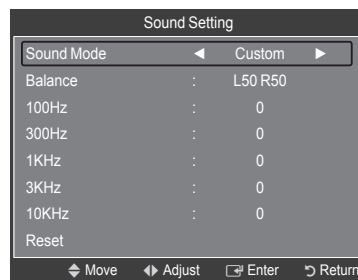
Picture Setting

1. Press the **TOOLS** while a Slide Show, music or movie is being played.
 2. Press the **▲** or **▼** button to select "Picture Setting".
 3. Press the **◀** or **▶** button to select the "Picture Mode" ("Dynamic", "Standard", or "Movie").
 4. Press the **▲** or **▼** button to move to an item. ("Contrast", "Brightness", "Colour", "Dynamic Contrast", "Black Adjust", or "Reset")
 - ☑ Select "Reset" to initialize the picture settings.
 5. Press the **◀** or **▶** button to adjust the settings.
- ☑ For more information on the picture settings, refer to pages 14~17.



Sound Setting

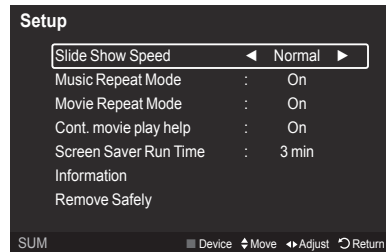
1. Press the **TOOLS** button while a Slide Show, music or movie is being played.
 2. Press the **▲** or **▼** button to select "Sound Setting".
 3. Press the **◀** or **▶** button to select the "Sound Mode". ("Standard", "Music", "Movie", "Speech", or "Custom")
 4. Press the **▲** or **▼** button to move to an item.
 - ☑ Select "Reset" to initialize the sound settings.
 5. Press the **◀** or **▶** button to adjust the settings.
- ☑ For more information on the sound settings, refer to page 19.



Using the Setup Menu

Setup displays the user settings of the WISELINK Pro menu.

1. Press the **W.LINK** button on the remote control to display the WISELINK Pro menu.
 2. Press the **◀** or **▶** button to select "Setup", then press the **ENTER** button.
 3. Press the **▲** or **▼** button to select the desired option.
 4. Press the **◀** or **▶** button to select the option, then press the **ENTER** button.
- ☑ To exit WISELINK Pro mode, press the **W.LINK** button on the remote control.
- Slide Show Speed → Fast/Slow/Normal
Select to control the slide show speed.
 - Music Repeat Mode → On/Off
Select to repeatedly play music files.
 - Movie Repeat Mode → On/Off
Select to repeatedly play movie files.
 - Cont. movie play help → On/Off
Select to display the help pop-up message for continuous movie playback.
 - Screen Saver Run Time → 1 min/3 min/5 min
Select to set the waiting time before the screen saver appears.
 - Information
Select to viewing the information of the connected device.
 - Remove Safely
You can remove the device safely from the TV.

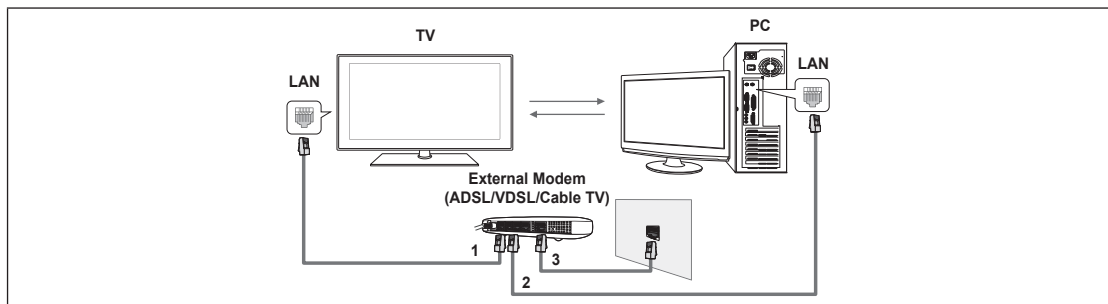


WISELINK Pro-DLNA

Setting the DLNA Network

DLNA allows you to watch videos and pictures saved on your PC on your TV through a network connection in Wiselink Pro mode. This removes the need to copy them to a USB storage device and then connect the device to your TV. To use DLNA, the TV must be connected to the network and the DLNA application must be installed on your PC.

Network Connections Diagram



1. Connect the [LAN] port on the rear panel of the TV to the external modem with a LAN Cable.
 2. Connect the PC to which the "DLNA PC Share Manager" programme will be installed and the external modem using a LAN cable.
 3. Connect the LAN port on the wall and the external modem with a Modem Cable.
- ☒ You can connect the TV to the PC directly without connecting it through a Sharer(Router).

Connecting to the Network

1. When connecting to the network is complete, set up the network on the TV.
 - ☒ The first 3 parts of the subnet address of the TV and the PC IP addresses should be the same and only the last part (the host address) should be changed. (e.g. IP Address: 123.456.789.**)
2. Run a "Network Test" to check the network settings.

Installing the DLNA Application

To play content on the PC on the TV, you have to first install the application.


■ System Requirements

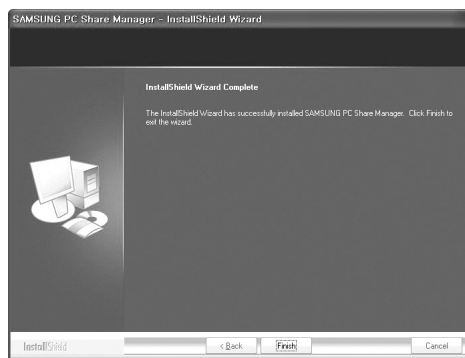
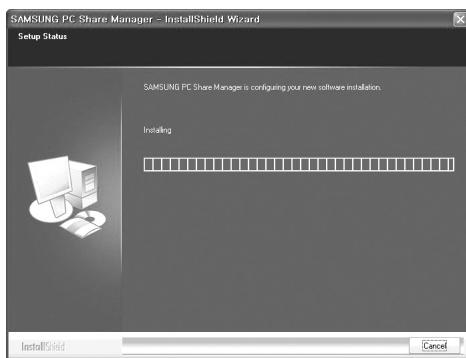
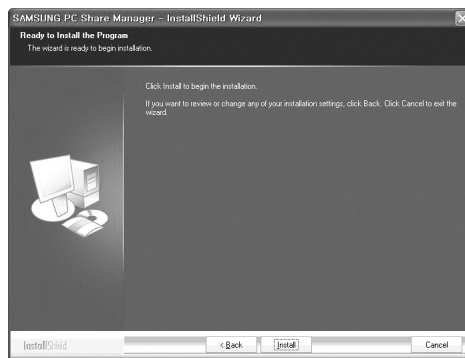
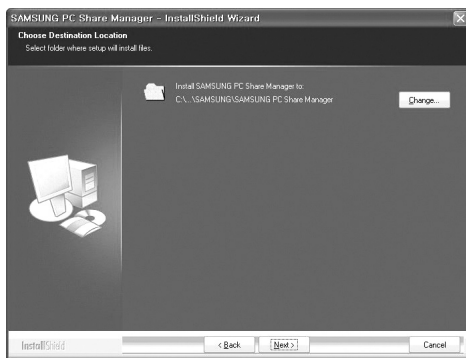
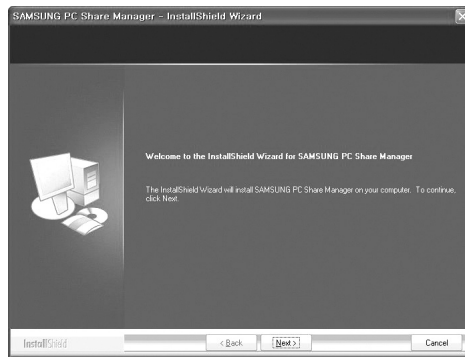
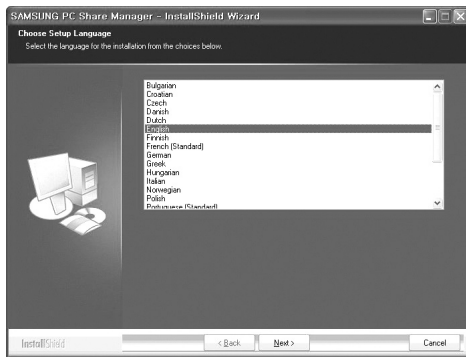
1. Insert the Programme CD supplied with this TV into your PC.
2. 20MB of free hard disk space is needed for the programme installation.
 - ☒ If you share files, up to 20MB of hard disk drive space is required for each 100 files.
 - ☒ If you cancel file sharing, the hard disk drive space used for the thumbnail information is also freed.


■ Supported Formats

1. Image: JPEG (jpg, jpeg)
2. Audio: MP3 (mp3)
3. Video: MPEG1(mpg, mpeg), MPEG2 PS/TS(mpg, mpeg, trp, ts, tp), divx(mpg, mpeg, avi), MPEG4/H.264 (mpg, mpeg)

■ Install the application

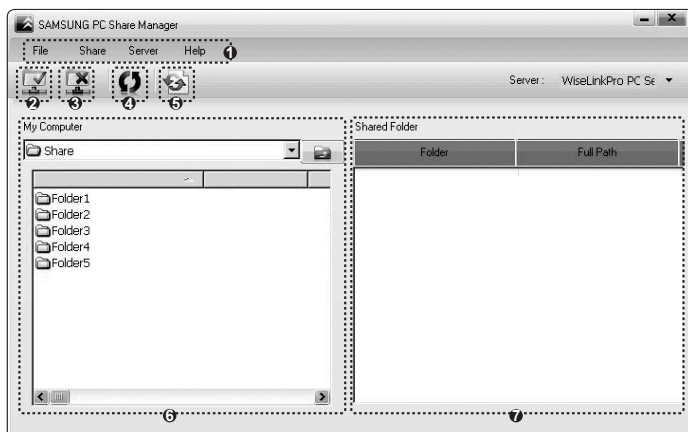
1. Run the Setup.exe file on the Programme CD supplied with the product.
 Alternatively, you can download the file from www.samsung.com.
2. Install the SAMSUNG PC Share Manager as shown in the figures below.



3. When the installation is complete, the PC Share Manager icon appears on your Desktop.
 Double-click the icon to run the programme.

Using the DLNA Application

The Programme Screen Layout



1. Menus: The following application menus are provided : "File", "Share", "Server", and "Help".
2. Click to share the selected PC server folder.
3. Click to cancel sharing.
4. Click to refresh the PC folder and files.
5. Click to synchronize the share status.
6. The folders and files of the PC to be shared are listed.
7. Folders shared by the user are listed.

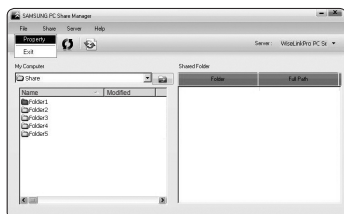
File

- Property: Shows information on the selected file or folder.

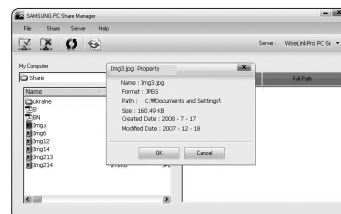
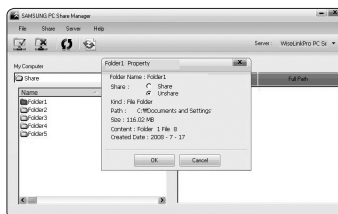
- **Method 1:** Select a file or folder and select the "File" menu and then select the "Property" sub-menu.

- **Method 2:** Select a file or folder, right-click over the selected file or folder and then select "Property" from the pop-up menu.

<Method 1>

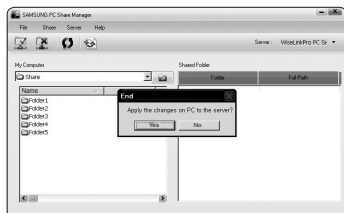


<Method 2>



- Exit: Exits the DLNA application.

If you select "Exit" without applying the changes after changing the shared status, a message will appear asking if you want to apply the changed settings to the PC. Select "Yes" to apply the changes and exit the application.



❏ Share

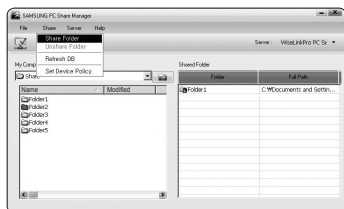
■ Sharing a Folder

You can share a folder from your PC to the TV. The maximum number of folders that can be shared is 32.

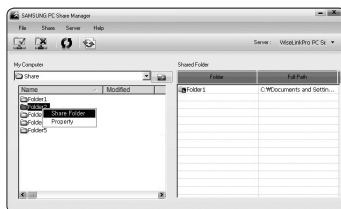
📌 Your PC will operate as a server to the TV.

- **Method 1:** Select a folder in "My Computer", select the "Share" menu and then select the "Share Folder" sub-menu.
- **Method 2:** Select a folder in "My Computer", right-click over the selected folder and then select "Share Folder" from the pop-up menu.
- **Method 3:** Locate the mouse pointer over a folder in the "My Computer" folder list in the left pane and drag&drop the folder into the Shared Folders pane. If a message appears asking you to confirm the shared folder, select "Yes".

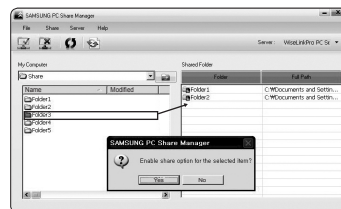
<Method 1>



<Method 2>



<Method 3>

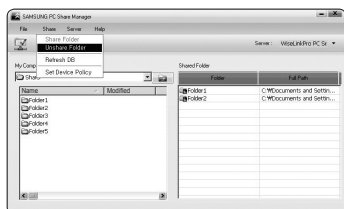


■ Cancelling a Shared Folder

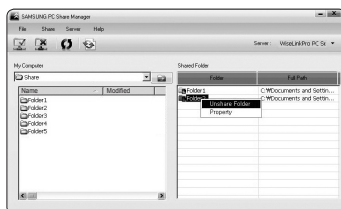
You can cancel a shared folder on your PC. Select a folder from the "Shared Folder" pane and select "Unshare Folder".

- **Method 1:** Select a folder from the "Shared Folder" pane, select the "Share" menu and then select "Unshare Folder".
- **Method 2:** Select a folder from the "Shared Folder" pane, right-click over the selected folder and then select "Unshare Folder" from the pop-up menu.
- **Method 3:** Locate the mouse pointer over a folder in the "Shared Folder" pane and drag&drop the folder into the "My Computer" pane. If a message appears asking you to confirm the cancelation, select "Yes".

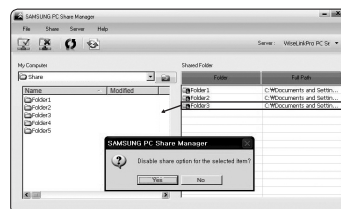
<Method 1>



<Method 2>



<Method 3>



■ Applying the Current Settings

Perform this when synchronization is necessary due to a new shared folder or canceling a shared folder. The "Set Changed State" menu applies changes to shared folders to the data saved with the PC share programme.

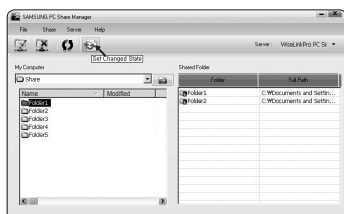
Since applying changes to the internal data is a time-consuming process, this function enables users to apply changes to the data only when required.

Until the "Set Changed State" menu is selected, the changed state of the shared folder is not applied to the server.

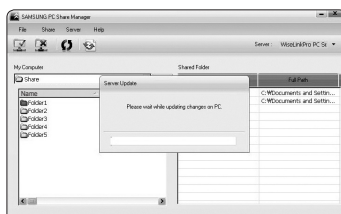
Changes to the shared folders are not applied to your PC until you select the "Set Changed State" menu.

- **Method 1:** Select the "Share" menu and select the "Refresh DB" sub-menu.
- **Method 2:** Click the "Set Changed State" icon.

<Method 1>



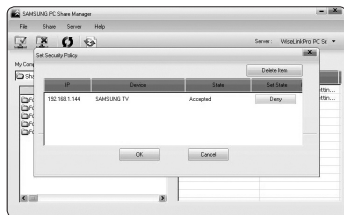
<Method 2>



■ Setting the Access Permission

To enable the TV to find your PC, the TV must be set to “Set Device Policy” in the Access Permission Settings window. In addition, the PC server and the TV must be on the same subnet.

- Method: Select the “Share” menu and select “Set Device Policy”. Rejected items are represented in gray. You can change the access permissions by using the Allow “Accept” / “Deny” button. To delete an item, select the item and select “Delete Item”.



□ Server

■ Server

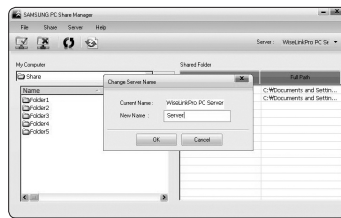
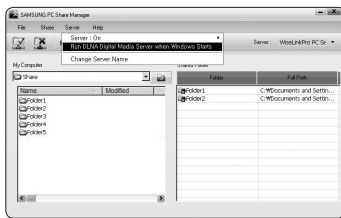
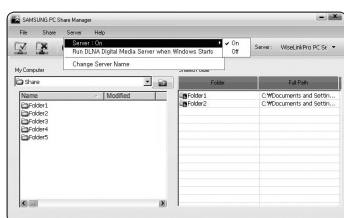
You can run or stop using your PC as a server.

■ Run DLNA Digital Media Server when Windows Starts

You can determine whether to start the PC server automatically when Windows starts.

■ Change server name

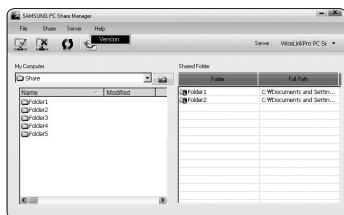
You can rename the PC server. Enter a new name and click “OK”. The new name will appear at the top right of the window and will appear on the TV.



□ Help

■ Version

The programme version information message box appears.



Using the DLNA Function

Using the DLNA Menu

DLNA (Digital Living Network Alliance) enables content saved on a DLNA server (usually your PC) connected to your TV or over a network to be played.

Wiselink Pro enables playing content saved on a USB memory device connected to the TV, while DLNA enables playing content saved on a DLNA server (your PC) connected to your TV or over the network. The procedures to use the content are the same as those for WISELINK Pro.

If you install the PC share manager programme supplied with the TV onto a PC, you can have the PC perform the role of a DLNA server over the network.

1. Press the **W.LINK** button on the remote control to display the "DLNA" menu.

 Press the **SOURCE** button on the remote control repeatedly to select "DLNA", then press the **ENTER** button.

2. Press the **◀** or **▶** button to select an icon (Photo, Music, Movie, Setup), then press the **ENTER** button.

 To exit "DLNA" mode, press the **W.LINK** button on the remote control.

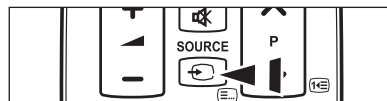
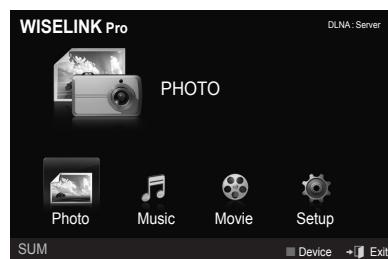


Photo (refer to pages 32~34)

- Photo List option menu

Sorting Photo List/Viewing the Information/Rotating the Photo file/Viewing a Slide Show

- During a Slide Show option menu

Play & Pause/Slide Show Speed/Zoom/Rotate

Music (refer to pages 35~37)

- Music List option menu

Sorting Music List/Viewing the Information/Playing a music file

- Music Play Option Menu

Play & Pause/Repeat Mode

Movie (refer to pages 38~39)

- Movie List option menu

Sorting Movie List/Viewing the Information/Playing a Movie file



- Movie Play Option Menu



Play & Pause/Repeat Mode


Setup (refer to page 40)

Slide Show Speed/Music Repeat Mode/Movie Repeat Mode/Screen Saver Run Time/Information

 DLNA does not support the following functions.

- The Background Music and Background Music Setting functions.
- Sorting files by preference in the Photo, Music, and Movie folders.
- The Change Group Info function.
- The Delete function.
- The Safe Remove function.
- The  (REW)/ (FF) button functions while a movie is playing.
- Function to watch continuously when playing movie.

 The Skip () or Pause function may not work while a movie is playing for the DLNA of other manufacturers, depending on the corresponding content information.

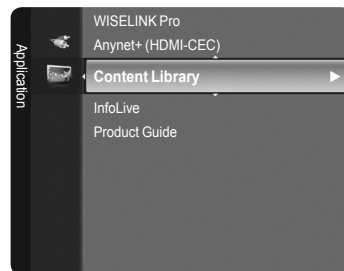
 The playing time may not be displayed while a movie is playing.

Content Library

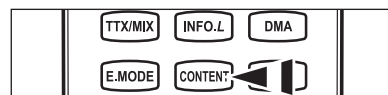
Activating the Content Library

The "Content Library" enables you to view or play the built-in contents on the TV or stored on your USB device. The Delete, Move and Update functions will not work with the built-in content on the TV.

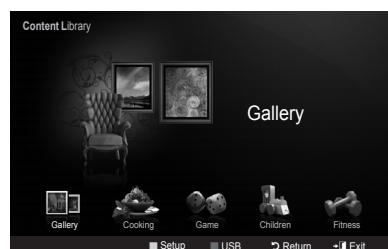
1. Press the **MENU** button. Press the **▲** or **▼** button to select "Application", then press the **ENTER** button.
2. Press the **▲** or **▼** button to select "Content Library", then press the **ENTER** button.
 - ☑ The "Content Library" main menu is displayed.



- ☑ Press the **CONTENT** button on the remote control to display the "Content Library" main menu.



3. Press the **◀** or **▶** button to select an icon (Gallery, Cooking, Game, Children, Fitness), then press the **ENTER** button.
 - ☑ The selected item will be run.
 - ☑ Refer to the explanation for the button in the display when the user uses the button while content is running.



Button	Operations
Wheel (▲/▼/◀/▶)	Move the cursor and select an item.
ENTER	Select the currently selected item.
RETURN	Return to the previous menu.
EXIT	Stop the current function and return to the "Content Library" main menu.
P ▼/▲, PRE-CH	Stop Content Library mode and Returns to TV mode.
Colour button	Button that provide functions are described on the corresponding page.
- ▲ +	You can control the volume of the played content.
CONTENT	Exit Content Library mode.

- ☑ If you press the Volume or **MUTE** button, no OSD is displayed, but the function operates accordingly.

Content Library contains text, graphics, images, multimedia, and other materials for informational and promotional purposes only. Materials in Content Library has been modified and keeps being revised and updated. The Materials in the Content Library may not be suitable for all audiences.

Information in the Content Library is provided "as is." Although the information provided to you in the Content Library is obtained or compiled from sources we believe to be reliable, Samsung cannot and does not guarantee the accuracy, validity, timeliness or completeness of any information or data made available to you for any particular purpose. Under no circumstances, including negligence, shall Samsung be held liable, whether in contract or tort, for any direct, indirect, incidental, special or consequential damages, attorney fees, expenses, or any other damages whatsoever arising out of, or in connection with, any information contained in, or the use of, the Content Library, even if advised of the possibility of such damages.

Using the Content Library

❑ Gallery

- Art/Relaxation/Party: This function plays a SlideShow with high resolution images and background music and produces various atmospheres. Using the Gallery function of the TV, you can change your home atmosphere.
 - 🔍 Press the yellow button to playback all imageries.
 - 🔍 There is default music for each for the "Art", "Relaxation", and "Party" options.
 - 🔍 Press **INFO** button to see the credit and detail information in English for the imagery. Press **INFO** button again or press ► button for the credit information to go away (currently, the credit supports English only.)
 - 🔍 The copyrights of the "Gallery" contents and all issues related to them are reserved by Gallery Player, Inc.
 - 🔍 For additional "Gallery" contents, check for information through www.samsung.com. Please refer to the "Using Additional Content Using External USB Memory Storage" section (page 49) to see how to play additional imagery.

❑ Cooking

- Starters/Main Courses/Desserts: You can view various recipes that you can then easily follow step by step. Enjoy these contents which give you great ideas for meals.
 - 🔍 The recipes introduced in the "Cooking" contents on the Samsung TV are based on recipes published by Anness Publishing.
 - 🔍 The copyrights of the "Cooking" contents and all issues related to them are reserved by Practical Pictures.

❑ Game

- Dynamic Bowling/Minimini Cook: This category provides entertainment games for the whole family.
 - 🔍 For the buttons used in the games, refer to the directions on the screen.
 - 🔍 For the 2 embedded games, the copyrights are reserved by each of the corresponding game providers and all issues related to copyrights are reserved by the corresponding game providers.
 - 🔍 More detail instruction on how to play a game is given at the beginning of each game page.


❑ Children

- Story/Song/Play: This is educational and interactive content that children can watch repeatedly. Enjoy existing stories, songs and games with the Boowa and Kwala characters.
 - 🔍 The copyrights of the "Children" contents and issues related to them are reserved by UpToTen.

❑ Fitness

- Basic Stretches/Massage: This is beneficial health management content that provides stretching and massage exercises that can be enjoyed by the whole family.
 - 🔍 This is beneficial health management content that provides stretching and massage exercises that can be enjoyed by the whole family. The "Basic Stretches" contents for the Samsung TV are based on the book Stretching by Suzanne Martin which is published by DK and the "Massage" contents are based on the books published by Anness Publishing.
 - 🔍 The copyrights to "Basic Stretches" are reserved by the DK Publishing Company. The copyrights to the "Massage" content are reserved by Practical Pictures. All issues related to copyrights are reserved by the corresponding company.

Using the Remote Control Button in Fitness menu

Button	Operations
Wheel (◀/▶)	View to previous step/View to next step
ENTER 	Play or pause (in Basic and Advanced Stretches)

❑ Screen Saver Run Time → Off / 4 hour / 8 hour / 10 hour

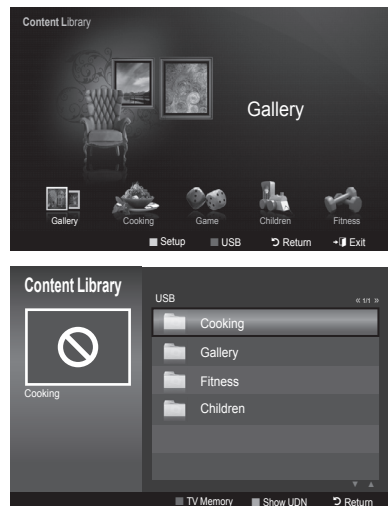
Select to set the waiting time before the screen saver appears.
Press the yellow button to select "Setup" in the "Content Library" main menu.

Using Additional Content Using External USB Memory Storage

You can download contents onto a USB memory device and play them on your TV. (The contents on the external USB device are played directly without being copied to the built-in Flash memory of the TV.)

Playing and Exiting New Content

1. Press the Red button in the "Content Library" main menu.
 - ☑ The USB Browser main screen is displayed.
 - ☑ A list of files saved on the USB device is displayed.
2. Press the ▲ or ▼ button to move to the file (or folder) you want to play. Press the **ENTER** button.
 - ☑ The selected content is played.
 - ☑ Not support game program.
 - ☑ The use of contents is the same as in using the TV memory contents.
 - ☑ To return to the USB browser main screen, press the **EXIT** button.
 - ☑ To exit "Content Library" mode, press the **PV/△** button on the remote control.
 - ☑ "Content Library" only supports USB Mass Storage Class devices (MSC). MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Readers (Both USB HDD and HUB are not supported.)



Downloading New Contents

New content other than the built-in contents will be provided via the Samsung.com website with or without charge.

- Downloading Content
 1. Visit the www.samsung.com website and open the Content Library page.
 2. Enter the product number (UDN, Unique Device Number) when it is asked.
 3. Select a content item in the Contents Download page.
 4. Download the contents onto the USB memory device.
 - ☑ "Content Library" only supports USB Mass Storage Class devices (MSC). MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Readers (Both USB HDD and HUB are not supported.)
 5. Go to "Content Library" main menu by pressing **CONTENT** button or choosing "Content Library"
 6. Plug the USB memory into USB port on the side of the TV.
- Finding a product number (Unique Device Number, UDN)
 1. Insert the USB memory into the USB port on the side of the TV.
 2. In the USB Browser main screen, press the Green button (Show UDN).
 3. The 18-digit number on the screen is the product code.
- Provided Content

Additional contents are available on www.samsung.com.

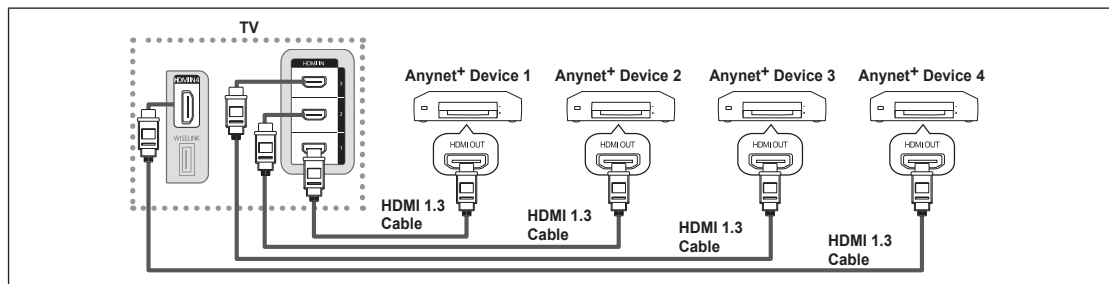
About Anynet+

Connecting Anynet+ Devices

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote.

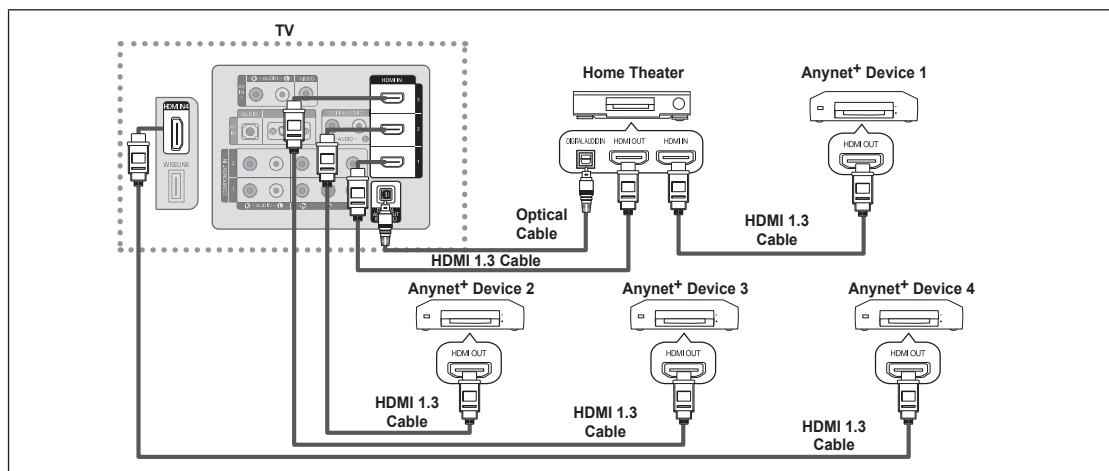
The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

To connect to a TV



1. Connect the [HDMI 1], [HDMI 2], [HDMI 3] or [HDMI 4] jack on the TV and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.

To connect to Home Theater



1. Connect the [HDMI 1], [HDMI 2], [HDMI 3] or [HDMI 4] jack on the TV and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.
 2. Connect the HDMI IN jack of the home theater and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.
- ☑ Connect the Optical cable between the Digital Audio Out (Optical) jack on your TV and the Digital Audio Input on the Home Theater.
 - ☑ When following the connection above, the Optical jack only outputs 2 channel audio. You will only hear sound from the Home Theater's Front Left and Right speakers and the subwoofer. If you want to hear 5.1 channel audio, connect the Digital Audio Out (Optical) jack on the DVD player or Cable/Satellite Box (ie Anynet Device 1 or 2) directly to the Amplifier or Home Theater, not the TV.
 - ☑ Connect only one Home Theater.
 - ☑ You can connect an Anynet+ device using the HDMI 1.3 cable. Some HDMI cables may not support Anynet+ functions.
 - ☑ Anynet+ works when the AV device supporting Anynet+ is in the Standby or On status.
 - ☑ Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

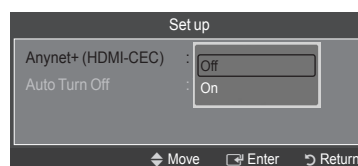
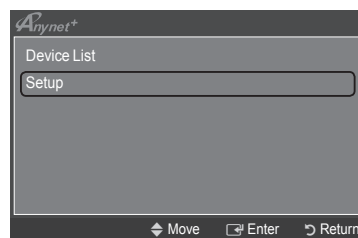
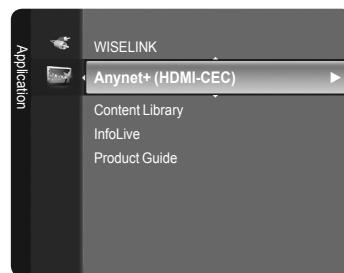
Setting Up Anynet+

❑ Anynet+(HDMI-CEC)

"Tools → Anynet+(HDMI-CEC)" performs the same function.

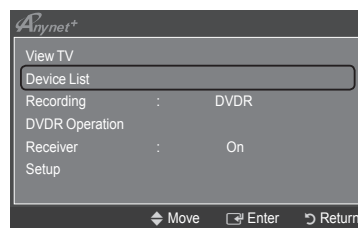
■ Setup

- Anynet+(HDMI-CEC) → Off / On: To use the Anynet+ Function, Anynet+ (HDMI-CEC) must be set to On.
 - ☑ When the "Anynet+ (HDMI-CEC)" function is disabled, all the Anynet+ related operations are deactivated.
- Auto Turn Off → No / Yes: Setting an Anynet+ Device to turn Off Automatically when the TV is Turned Off
 - ☑ The active source on the TV remote must be set to TV to use the Anynet+ function.
 - ☑ If you set "Auto Turn Off" to "Yes", connected external devices are also turned off when the TV is turned off. If an external device is still recording, it may or may not turn off.



Scanning and Switching between Anynet+ Devices

1. Press the **TOOLS** button. Press the **ENTER** button to select "Anynet+ (HDMI-CEC)".
2. Press the **▲** or **▼** button to select "Device List", then press the **ENTER** button
 - ☑ Anynet+ devices connected to the TV are listed. If you cannot find a device you want, press the red button to scan for devices.
 - ☑ Only when you set "Anynet+ (HDMI-CEC)" to On in the "Setup" menu, the "Device List" menu appears.
3. Press the **▲** or **▼** button to select a particular device and press the **ENTER** button. It is switched to the selected device.
 - ☑ Switching to the selected devices may take up to 2 minutes. You cannot cancel the operation during the switching operation.
 - ☑ The time required to scan for devices is determined by the number of connected devices.
 - ☑ When the device scan is complete, the number of devices found are not displayed.
 - ☑ Although the TV automatically searches the device list when the TV is turned on via the power button, devices connected to the TV when the TV is on or under some conditions are not automatically displayed in the device list. Press the red button to search for the connected device.
 - ☑ If you have selected external input mode by pressing the **SOURCE** button, you cannot use the Anynet+ function. Make sure to switch to an Anynet+ device by using the "Device List".



Anynet+ Menu

The Anynet+ menu changes depending on the type and status of the Anynet+ devices connected to the TV.

Anynet+ Menu	Description
View TV	Anynet+ mode changes to TV broadcast mode.
Device List	Shows the Anynet+ device list.
(device_name) Menu	Shows the connected device menus. E.g. If a DVD recorder is connected, the disc menu of the DVD recorder will appear.
(device_name) Operation	Shows the play menu of the connected device. E.g. If a DVD recorder is connected, the play menu of the DVD recorder will appear.
Record: (*recorder)	Starts recording immediately using the recorder. (This is only available for devices that support the recording function.)
Stop Recording: (*recorder)	Stops recording.
Receiver	Sound is played through the receiver.

- ☑ If more than one recording device is connected, they are displayed as (*recorder) and if only one recording device is connected, it will be represented as (*device_name).

TV Remote Control Buttons Available in Anynet+ Mode

Device Type	Operating Status	Available Buttons
Anynet+ Device	After switching to the device, when the menu of the corresponding device is displayed on the screen.	Numeric buttons ▲/▼/◀/▶/ENTER buttons Colour buttons / EXIT button
	After switching to the device, while playing a file	◀◀(Backward search) / ▶▶(Forward search) ■(Stop) / ▶(Play) / (Pause)
Device with built-in Tuner	After switching to the device, when you are watching a TV programme	P ▼ / P ▲ button
Audio Device	When Receiver is activated	Volume / MUTE button

- ☑ The Anynet+ function only works when the active source on the TV remote control is set to TV.
- ☑ The ■ button works only while in the recordable state.
- ☑ You cannot control Anynet+ devices using the buttons on the TV. You can control Anynet+ devices only using the TV remote control.
- ☑ The TV remote control may not work under certain conditions. In this case, reselect the Anynet+ device.
- ☑ The Anynet+ functions do not operate with other manufacturers' products.
- ☑ The ◀◀, ▶▶ operations may differ depending on the device.

Recording

You can make a recording of a TV programme using a Samsung recorder.

1. Press the **TOOLS** button. Press the **ENTER** button to select "Anynet+ (HDMI-CEC)".
2. Press the ▲ or ▼ button to select "Recording: (device_name)", then press the **ENTER** button. Recording begins.

☑ When there is more than one recording device

When multiple recording devices are connected, the recording devices are listed. Press the ▲ or ▼ button to select a recording device and press the **ENTER** button. Recording begins.

☑ When the recording device is not displayed

Select "Device List" and press the red button to search devices.

3. Press the **EXIT** button to exit.

- ☑ You can record the source streams by selecting "Recording: (device_name)".
- ☑ Pressing the ■ button will record whatever you are currently watching. If you are watching video from another device, the video from the device is recorded.
- ☑ Before recording, check whether the antenna jack is properly connected to the recording device. To properly connect an antenna to a recording device, refer to the recording device's users manual.

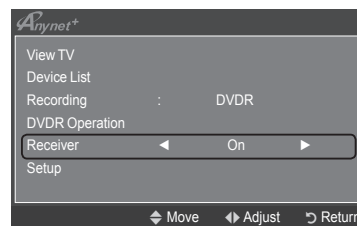


Listening through a Receiver (Home theater)

You can listen to sound through a receiver instead of the TV speaker.

1. Press the **TOOLS** button. Press the **ENTER** button to select "Anynet+ (HDMI-CEC)".
2. Press the **▲** or **▼** button to select "Receiver". Press the **◀** or **▶** button to select "On" or "Off".
3. Press the **EXIT** button to exit.

- ☑ If your receiver supports audio only, it may not appear in the device list.
- ☑ The receiver will work when you have properly connected the Optical IN jack of the receiver to the Optical Out jack of the TV.
- ☑ When the receiver (home theater) is set to On, you can hear sound output from the TV's Optical jack. When the TV is displaying a DTV(air) signal, the TV will send out 5.1 channel sound to the Home theater receiver. When the source is a digital component such as a DVD and is connected to the TV via HDMI, only 2 channel sound will be heard from the Home Theater receiver.
- ☑ When using the WISELINK Pro feature, sound may not output properly through the receiver.
- ☑ When listening through the receiver, there are restrictions for using the PIP and audio-related menus.
- ☑ If there is a power interruption to the TV when the "Receiver" is set to "On" (by disconnecting the power cord or a power failure), the "Select Speaker" may be set to "External Speaker" when you turn the TV on again. (see page 20)



Troubleshooting for Anynet+

Symptom	Solution
Anynet+ does not work.	<ul style="list-style-type: none"> • Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only. • Connect only one receiver (home theater). • Check if the Anynet+ device power cord is properly connected. • Check the Anynet+ device's Video/Audio/HDMI 1.3 cable connections. • Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu. • Check whether the TV remote control is in TV mode. • Check whether it is Anynet+ exclusive remote control. • Anynet+ doesn't work in certain situations. (Searching channels, Operating WISELINK Pro, Plug & Play, etc.) • When connecting or removing the HDMI 1.3 cable, please make sure to search devices again or turn your TV off and on again. • Check if the Anynet+ Function of Anynet+ device is set on.
I want to start Anynet+.	<ul style="list-style-type: none"> • Check if the Anynet+ device is properly connected to the TV and check if the Anynet+ (HDMI-CEC) is set to On in the Anynet+ Setup menu. • Press the TV button on the TV remote control to switch to TV. Then press the TOOLS button to show the Anynet+ menu and select a menu you want.
I want to exit Anynet+.	<ul style="list-style-type: none"> • Select View TV in the Anynet+ menu. • Press the SOURCE button on the TV remote control and select a device other than Anynet+ devices. • Press P ▼/▲ and PRE-CH to change the TV mode. (Note that the channel button operates only when a tuner-embedded Anynet+ device is not connected.)
The message Connecting to Anynet+ device... appears on the screen.	<ul style="list-style-type: none"> • You cannot use the remote control when you are configuring Anynet+ or switching to a view mode. • Use the remote control when the Anynet+ setting or switching to view mode is complete.
The Anynet+ device does not play.	You cannot use the play function when Plug & Play is in progress.
The connected device is not displayed.	<ul style="list-style-type: none"> • Check whether or not the device supports Anynet+ functions. • Check whether or not the HDMI 1.3 cable is properly connected. • Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu. • Search Anynet+ devices again. • You can connect an Anynet+ device using the HDMI 1.3 cable only. Some HDMI cables may not support Anynet+ functions. • If it is terminated by an abnormal situation such as disconnecting the HDMI cable or power cord or a power failure, please repeat the device scan.
The TV programme cannot be recorded.	Check whether the antenna jack on the recording device is properly connected.
The TV sound is not output through the receiver.	Connect the optical cable between TV and the receiver.

Using InfoLive

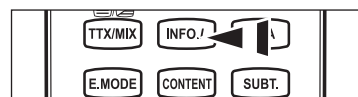
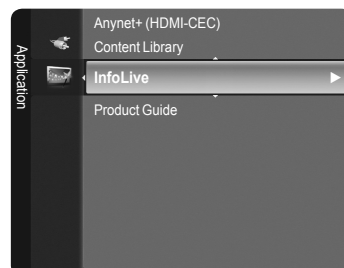
You can view news, stock market and weather information services using SAMSUNG's InfoLive service.

✎ Set up the network. (Refer to pages 25~26)

1. Press the **MENU** button to display the menu. Press the **▲** or **▼** button to select "Application", then press the **ENTER** button.
2. Press the **▲** or **▼** button to select "InfoLive", then press the **ENTER** button.
3. Press the **◀** or **▶** button to select a service ("Weather", "News", "Stocks" or "Setup") and press the **ENTER** button.

✎ You can select and view more than one service at the same time only for 'News (without detailed information)', 'Weather-Today's Weather', and 'Stocks-Favorite Stocks, Market Summary'.

ℹ Press the **INFO.L** button on the remote control to display the "InfoLive" menu.




ALL THE MATERIALS AVAILABLE THROUGH InfoLive ['InfoLive CONTENT'] ARE THE PROPERTY OF THE ORIGINATOR OF THE CONTENT ['CONTENT OWNER'] AND/OR ITS AFFILIATES OR LICENSORS, AND ARE PROTECTED BY COPYRIGHT, TRADEMARK, AND OTHER INTELLECTUAL PROPERTY LAWS. ALL InfoLive CONTENT IS PROVIDED SOLELY FOR YOUR PERSONAL NONCOMMERCIAL USE. YOU MAY NOT USE ANY InfoLive CONTENT IN A MANNER THAT CONSTITUTES AN INFRINGEMENT OF THE CONTENT OWNERS' RIGHTS OR THAT HAS NOT BEEN AUTHORIZED BY THE CONTENT OWNER. MORE SPECIFICALLY, UNLESS EXPLICITLY AUTHORIZED IN THIS DISCLAIMER OR BY THE CONTENT OWNER, YOU MAY NOT MODIFY, COPY, REPRODUCE, REPUBLISH, UPLOAD, POST, TRANSMIT, TRANSLATE, SELL, CREATE DERIVATIVE WORKS, EXPLOIT, OR DISTRIBUTE IN ANY MANNER OR MEDIUM (INCLUDING BY EMAIL OR OTHER ELECTRONIC MEANS) ANY InfoLive CONTENT OR ANY OTHER MATERIAL FROM THE InfoLive SERVICE. CONTENT PROVIDED CONTENT OWNERS IN CONNECTION WITH THE InfoLive SERVICE MAY BE TIME-DELAYED AS SPECIFIED BY THE CONTENT OWNER AND/OR ITS AFFILIATES.

InfoLive IS PROVIDED THROUGH AGREEMENT BETWEEN SAMSUNG AND THE CONTENT OWNER. InfoLive MAY BE TERMINATED OR INTERRUPTED AT ANY TIME BY EITHER SAMSUNG OR THE CONTENT PROVIDER OR THROUGH TERMINATION OF THE AGREEMENT BETWEEN THEM. UNDER NO CIRCUMSTANCES, INCLUDING NEGLIGENCE, SHALL SAMSUNG OR THE CONTENT PROVIDER BE HELD LIABLE, WHETHER IN CONTRACT OR TORT, FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, ATTORNEY FEES, EXPENSES, OR ANY OTHER DAMAGES WHATSOEVER ARISING OUT OF, OR IN CONNECTION WITH, SUCH TERMINATION OR INTERRUPTION. SINCE CONTENT TRANSMITTED VIA InfoLive IS RECEIVED BY MEANS OF NETWORKS AND TRANSMISSION FACILITIES OVER WHICH SAMSUNG HAS NO CONTROL, SAMSUNG EXPRESSLY DISCLAIMS ANY RESPONSIBILITY OR LIABILITY FOR ANY INTERRUPTION OR SUSPENSION OF INTERLINK SERVICE OR FOR THE ABSENCE OF CONTENT RESULTING THEREFROM.



INFORMATION IN THE InfoLive IS PROVIDED "AS IS," AND CONSEQUENTLY, SAMSUNG DOES NOT WARRANT THE INFORMATION SO PROVIDED, EITHER EXPRESSLY OR IMPLIEDLY, FOR ANY PARTICULAR PURPOSE; AND SAMSUNG EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SAMSUNG DOES NOT GUARANTEE THE ACCURACY, VALIDITY, TIMELINESS, LEGALITY, OR COMPLETENESS OF ANY INFORMATION OR DATA MADE AVAILABLE THROUGH InfoLive FOR ANY PARTICULAR PURPOSE AND UNDER NO CIRCUMSTANCES, INCLUDING NEGLIGENCE, SHALL SAMSUNG BE HELD LIABLE, WHETHER IN CONTRACT OR TORT, FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, ATTORNEY FEES, EXPENSES, OR ANY OTHER DAMAGES WHATSOEVER ARISING OUT OF, OR IN CONNECTION WITH, ANY INFORMATION CONTAINED IN, OR AS A RESULT OF THE USE OF InfoLive BY YOU OR ANY THIRD PARTY, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

✎ Access to InfoLive is subject to the Yahoo's Terms of Service available on page 66.

Using the Weather Service

1. Press the **INFO.L** button on the remote control.
2. Press the ◀ or ▶ button to move to the "Weather" service and press the **ENTER**  button.



3. Press the Red button while using the service to change the "Weather" service option.
4. Press ▲ or ▼ button and select "Weather" option.
 -  To exit the "Weather" service, press the Blue button.
 -  To exit the "InfoLive" service, press the **EXIT** button.



Using the News Service

The news provider may be changed in the future.

1. Press the **INFO.L** button on the remote control.
2. Press the ◀ or ▶ button to move to the "News" service and press the **ENTER** button.
 - ☑ Press the **ENTER** button to view the detailed article.
 - ☑ Press the ◀ or ▶ button to view the previous or next article.
3. Press the Red button while using the service to change the "News" service Option.
4. Press ▲ or ▼ button and select "News" service option.
 - ☑ The News service option changes depending on the provided web service.
 - ☑ To exit the "News" service, press the Blue button.
 - ☑ To exit the "InfoLive" service, press the **EXIT** button.



Using the Stock Service

1. Press the **INFO.L** button on the remote control.
2. Press the ◀ or ▶ button to move to the "Stocks" service and press the **ENTER** button.
3. Press the Red button while using the service to change the "Stocks" service option.
4. Press ▲ or ▼ button and select "Stocks" service option, then press the **ENTER** button.
 - ☑ Stock quotes delayed at least 20 minutes. The time delay differs according to the region.
 - ☑ To exit the "Stocks" service, press the Blue button.
 - ☑ To exit the "InfoLive" service, press the **EXIT** button.

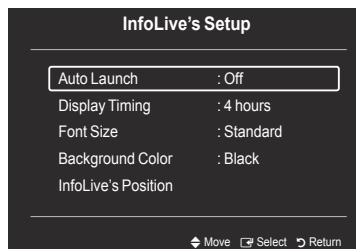


InfoLive Setup

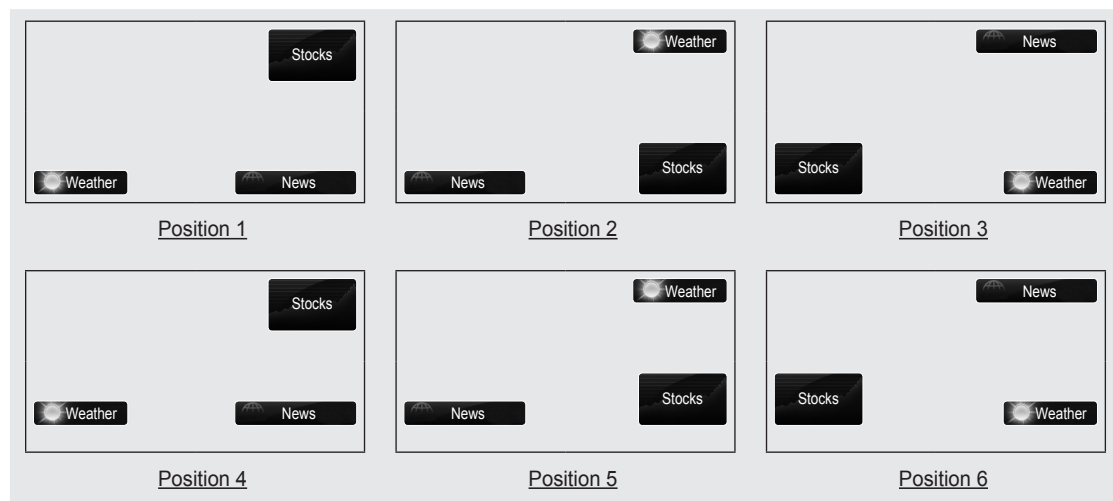
1. Press the **INFO.L** button on the remote control.
2. Press the ◀ or ▶ button to select "Setup", then press the **ENTER** button.
3. Press the ▲ or ▼ button to select the desired option. ("Auto Launch", "Display Timing", "Font Size", "Background Color", "InfoLive's Position")
4. Press the ▲ or ▼ button to select an option, then press the **ENTER** button.

- Auto Launch: Determines whether to launch InfoLive automatically when the TV is turned on. You can select either "Off" or "On".
- Display Timing: Determines the time to display the news service on the TV screen. You can select "4 hours", "8 hours", "10 hours", or "Always".
- Font Size: You can select letter size "Standard" or "Large" through InfoLive service.
- Background Color: You can select the Background Color of InfoLive service. The Color is applied to each service, option and setup window. You can select "Blak", "Blue", "Red", "Green" or "Gray".
- InfoLive's Position: You can set the position of each InfoLive service on the screen. You can select from six preset InfoLive positions ("Position 1"~"Position 6").

- ☑ To exit the "Setup" service, press the **RETURN** button.
- ☑ To exit the "InfoLive" service, press the **EXIT** button.



InfoLive's Position
















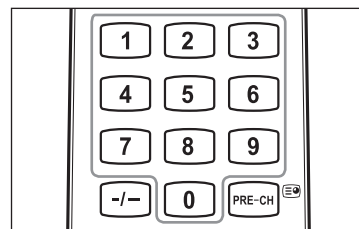
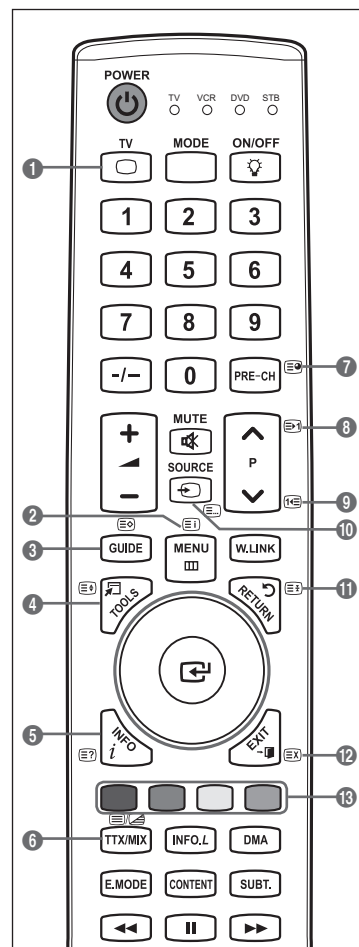
Recommendations for Use

Teletext Feature

Most television stations provide written information services via Teletext. The index page of the teletext service gives you information on how to use the service. In addition, you can select various options to suit your requirements by using the remote control buttons.

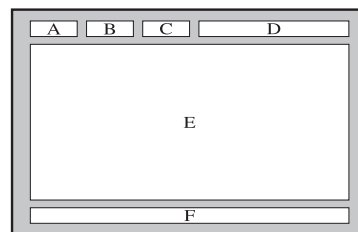
- ☑ For teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

- 1  **(exit)**
Exit from the teletext display.
 - 2  **(index)**
Used to display the index (contents) page at any time while you are viewing teletext.
 - 3  **(store)**
Used to store the teletext pages.
 - 4  **(size)**
Press to display the double-size letters in the upper half of the screen. For lower half of the screen, press it again. To display normal screen, press it once again.
 - 5  **(reveal)**
Used to display the hidden text (answers to quiz games, for example). To display normal screen, press it again.
 - 6  **(teletext on/mix)**
Press to activate teletext mode after selecting the channel providing the teletext service. Press it twice to overlap the teletext with the current broadcasting screen.
 - 7  **(sub-page)**
Used to display the available sub-page.
 - 8  **(page up)**
Used to display the next teletext page.
 - 9  **(page down)**
Used to display the previous teletext page.
 - 10  **(mode)**
Press to select the teletext mode (LIST/FLOF). If you press it in the LIST mode, it switches into the List save mode. In the List save mode, you can save teletext page into list using the  (store) button.
 - 11  **(hold)**
Used to hold the display on a given page if the selected page is linked with several secondary pages which follow on automatically. To resume, press it again.
 - 12  **(cancel)**
Used to display the broadcast when searching for a page.
 - 13 **Colour buttons (red/green/yellow/blue)**
If the FASTEXT system is used by a broadcasting company, the different topics covered on a teletext page are colour-coded and can be selected by pressing the coloured buttons. Press one of them corresponding to the required. The page is displayed with other coloured information that can be selected in the same way. To display the previous or next page, press the corresponding coloured button.
- ☑ You can change teletext pages by pressing the numeric buttons on the remote control.



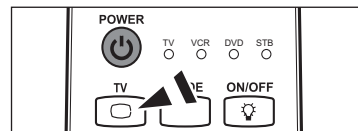
The teletext pages are organized according to six categories:

Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information. FASTEXT information.



- ☑ Teletext information is often divided between several pages displayed in sequence, which can be accessed by:
 - Entering the page number
 - Selecting a title in a list
 - Selecting a coloured heading (FASTEXT system)

- 📺 Press the **TV** button to exit from the teletext display.



Setting Up Your Remote Control

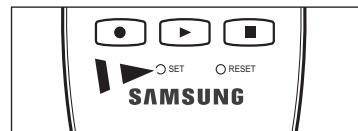
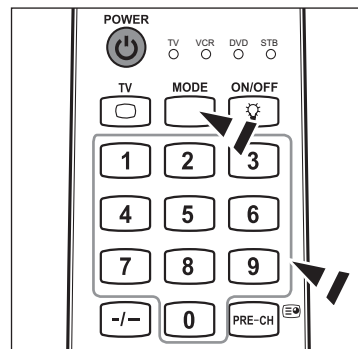
After the television has been set up properly, your remote control can operate in different modes: TV, VCR, DVD, Set-Top Box, Cable Box. Pressing the corresponding button on the remote control allows you to switch between these modes and control whichever piece of equipment you choose.

- ☑ The remote control might not be compatible with all DVD Players, VCRs, Set-Top Boxes and Cable Box.

Setting Up the Remote to Operate Your VCR, DVD, STB and Cable Box

1. Turn off your VCR, DVD, STB and Cable Box.
2. Press the **MODE** button and make sure that the VCR, DVD and STB LED is illuminated.
3. Press the **SET** button on your TV's remote control.
4. Using the number buttons on your remote control, enter three digits of the VCR, DVD, STB or Cable Box code listed on pages 60~61 of this manual for your brand of VCR, DVD, STB or Cable Box. Make sure you enter three digits of the code, even if the first digit is a "0". (If more than one code is listed, try the first one.)
5. Press the **POWER** button on the remote control. Your VCR, DVD, STB or Cable Box should turn on if your remote is set up correctly. If your VCR, DVD, STB or Cable Box does not turn on after set up, repeat steps 2, 3 and 4, but try one of the other codes listed for your brand of VCR, DVD, STB or Cable Box. If no other codes are listed, try each VCR, DVD, STB or Cable Box code, 000 through 080.

- ☑ When your remote control is in VCR, DVD or STB mode, the volume buttons still control your TV's volume



Remote Control Codes

■ VCR

Brand	Code
SAMSUNG	000 001 002 003 004 005 077 078 079
ADMIRAL	020
AIWA	025
AKAI	004 027 032
AUDIO DYNAMICS	007 026
BELL&HOWELL	018
BROKSONIC	022
CANDLE	002 003 006 008 015 055
CANON	021 056
CITIZEN	002 003 006 008 015 055
COLORTYME	007
CRAIG	002 024
CURTIS MATHES	002 007 008 017 021 025 056 064 066
DAEWOO	003 010 011 012 013 014 015 016
DB	007 026
DIMENSIA	017
DYNATECH	025
ELECTROHOME	034
EMERSON	001 003 006 021 022 025 030 032 034 040 047 050 052 060 063 065 066 067 069 073
FISHER	018 024 028 029 048 051 061
FUNAI	025
GENERAL ELECTRIC	002 005 017 021 056
GO VIDEO	002
HARMAN KARDON	007
HITACHI	019 025 041 042 074
INSTANT REPLAY	021
JC PENNEY	002 007 018 019 021 026 037 041 054 056
JCL	007 008 018 021 026 037
JVC	081 082 083
KENWOOD	007 008 018 026 037
KLH	070
KONIA	036
LG(Goldstar)	006 007 008 009 010
LLOYD	025
LOGIK	038
LXI	025
MAGNAVOX	021 056 059
MARANTZ	007 008 018 021 026 037 062
MARTA	006
MEI	021
MEMOREX	006 021 024 025
MGA	034
MIDLAND	005
MINOLTA	019 041 075
mitsubishi	019 034 041 046

Brand	Code
MONTGOMERY WARD	020
MTC	002 025
MULTITECH	002 005 025 038
NEC	007 008 018 026 037 062 064
OPTIMUS	020
ORION	073 074 075 076
PANASONIC	021 056 071 072
PENTAX	019 041 075
PENTEX RESEARCH+	008
PHILCO	021 056 059
PHILIPS	021 080
PIONEER	019 026 039 053
PORTLAND	015 049 055
PROSCAN	017
QUARTZ	018
QUASAR	021 056
RADIO SHACK/ REALISTIC	006 018 020 021 024 025 029 034 048 056
RCA	002 017 019 021 035 041 043 057 068 076
SANSUI	026
SANYO	018 024
SCOTT	003 047 052 067
SEARS	006 018 019 024 028 029 041 048 051
SHARP	020 034 045 015
SHIMTOM	027 033 038 058
SIGNATURE	025
SONY	027 033 044
SYLVANIA	021 025 056 059
SYMPHONIC	025
TANDY	018 025
TASHIKA	006
TATUNG	037
TEAC	025 037 068
TECHNICS	021
TEKNIKA	006 021 025 031
TMK	066
TOSHIBA	003 019 029 051 052
TOTEVISION	002 006
UNITECH	002
VECTOR RESEARCH	007 026
VICTOR	026
VIDEO CONCEPTS	007 026
VIDEOSONIC	002
WARDS	002 003 006 019 020 021 024 025 034 038 041
YAMAHA	007 008 018 026 037
ZENITH	023 027 033

■ SAMSUNG DVD

Product	Code
DVD	000 001 002 022
DVDR	003 004
BD Record	005 006
VCR COMBO	007 008 009 010 011
VCR Record	012
DHR COMBO	013

Product	Code
Home Theater VCR COMBO	014 015 016
HDD Recorder COMBO	017
TWIN TRAY COMBO	018
STB DVD COMBO	019
DVD Receiver	020
AV Receiver	021

DVD

Product	Code
ANAM	030
AUDIOVOX	075
AUDIOLOGIC	085
ANABA	072
APEX DIGITAL	070 071 074 086 083 084 088 111 112
AIWA	114
BROKSONIC	062
BLAUPUNKT	074
B&K	122 123
CURTIS MATHES	027
CYBER HOME	077 078 079 082
CLARION	080 125
CIRRUS	081
CYBER HOME	065
CINEVISION	095
DAEWOO	066
DENON	146
FARENHEIT	067 068
FISHER	090
GPX	060
GO VIDEO	061 089 133 135
GE	069 074
GREENHILL	074
HITACHI	064 113
HITEKER	071
HOYO	073
HARMAN / KARDON	091 110
IRT	089
INTEGRA	092
JBL	091
JVC	022 033 115 116
JATON	073
KENWOOD	051 108 109
KISS	073
KONKA	059 100 106 107
KLH	074 075
LG(Goldstar)	025 031
LOEWE	057
LASONIC	058
MOBILE AUTHORITY	054
MEMOREX	055
MALATA	056
MAGNAVOX	076 093
MINTEK	074 094

Product	Code
MONYKA	073
NORCENT	048 049 050
NEXT BASE	052
NEC	053
NANTAU	144
NESA	074
OPTOMEDIA ELECTRONICS	105
OPTIVIEW	072
ONKYO	076 092 119
PHILCO	044 045
PRINCETON	046 047
PROSCAN	023
PANASONIC	024 034 124 134 136 137 138
PHILIPS	036 076
PIONEER	037 143
ROTEL	117 118
RIO	120
RCA	023 035 074 075 131 132
RAITE	073
ROWA	038
SAMPO	104
SONY	026 029 126 127 128 129 130 141
SHERWOOD	039 041
SVA	042
SYLVANIA	043 093
SHARP	140
SANSUI	062
SANYO	062 090
PANASONIC	024 034 124 134 136 137 138
PHILIPS	036 076
PIONEER	037 143
ROTEL	117 118
RIO	120
RCA	023 035 074 075 131 132
RAITE	073
ROWA	038
SAMPO	104
SONY	026 029 126 127 128 129 130 141
SHERWOOD	039 041
SVA	042
SYLVANIA	043 093
SHARP	140
SANSUI	062
SANYO	062 090

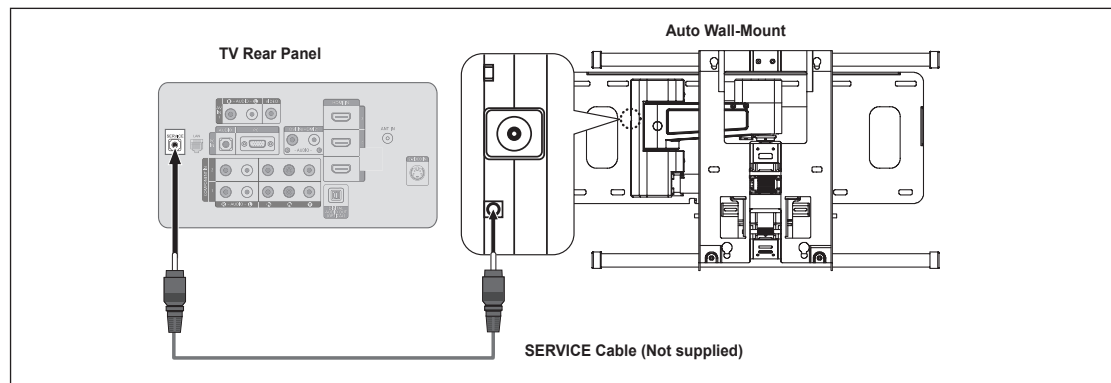
SET-TOP BOX, CABLE BOX

Product	Code
ALPHASTAR	023
ANAM	043
CHANNEL MASTER	018 034
CROSSDIGITAL	019
CHAPARRAL	035
DIRECT TV	015 016 017 019 022 045 060 061 062 065 066
	067 068
DAEWOO	074
DISH NETWORK SYSTEM	069 070
DISHPRO	069
DRAKE	018 024 032
DX ANTENNA	027
ECHOSTAR	025 069 070 071
EXPRESSVU	069
GE	065
GENERAL INSTRUMENT	046 047 048 063 064
GI	116
GOI	069
HAMLIN	078 099 106
HTS	069
HOME CABLE	056
HITACHI	022 100 105
HUGHES NETWORK	015 017
IQ	020
IQ PRISM	020
JANEIL	059
JERROLD	063 113 114
JVC	069 070
LG(Goldstar)	044 073
MAGNAVOX	016 021 036 038 039 040 041 042 084 098 103
MEMOREX	016
MOTOROLA	064
MACOM	018 100 105
MITSUBISHI	015
NEXT LEVEL	047 048 064
OAK	101

Product	Code
PHILIPS	015 016 017 021 033 036 038 039 040 041 042
	067 094 096 098 103
PIONEER	093 095 079 119
PRIMESTAR	046 049 050 063
PANASONIC	058 059 061 062 078 097 102 112 119
PAYSAT	016
PROSCAN	065 066
RCA	051 052 053 065 066 089 097 115
RADIO SHACK	064
REALISTIC	057
REGAL	078
REGENCY	090 098
SA	117 118
SAMSUNG	000 001 002 003 004 008 009 010 011 012 013
	014 075 080 078 079 081 082 076 077
SCIENTIFIC ATLANTA	117 118
STAR TRAK	026
STS	020 027
SKY	031
SKY LIFE	005 006 007
SHACK	064
STAR CHOICE	064
SONY	054 060
SPRUCER	097
STARGATE 2000	111
SYLVANIA	091
TEXSCAN	091
TOCOM	107
TOSHIBA	015 017 028 029 030 072
ULTIMATE TV	060 066
UNIDEN	016 021 037 055 056 057
UNIVERSAL	108 109
VIEWSTAR	094 096 098 103
WAMER AMEX	121
ZENITH	024 031 068 092 104 110 112 120

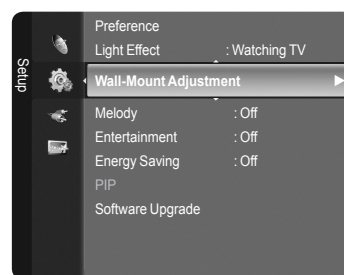
Auto Wall-Mount Adjustment (Sold separately) (depending on the model)

Once the auto wall mount is installed, your TV's position can be easily adjusted.



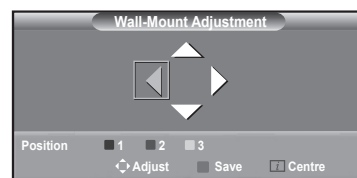
Entering the menu

- Press the **▲**, **▼**, **◀** or **▶** button on your remote control.
 - ☒ The Wall Mount Adjustment screen is displayed.
 - ☒ If the Auto Wall-Mount screen is not displayed when clicking on a direction button while watching your TV, use the menu to display that screen.
 - Press the **MENU** button to display the menu. Press the **▲** or **▼** button to select "Setup", then press the **ENTER** button.
 - Press the **▲** or **▼** button to select "Wall-Mount Adjustment", then press the **ENTER** button.



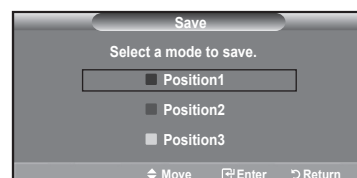
Remembering the Position

- Adjust to the desired position using the **▲**, **▼**, **◀**, **▶** buttons.
 - ☒ If you press an arrow button when no OSD is displayed on the TV screen, the Adjustment screen appears.
 - ☒ Press the **INFO** button to reset. Press the **◀** or **▶** button to select "Yes", then press the **ENTER** button. The position is initialized to the default setting.
- Press the blue button. Press the **▲** and **▼** buttons to select a save mode from either Position 1, Position 2 or Position 3 in order to save the current position.
 - ☒ To not save the current position, press the **RETURN** button.
 - ☒ When selecting a save mode, you cannot use the Colour buttons.
- Press the **ENTER** button to save.
 - ☒ When Position1 is selected, the message "Current position saved as Position1" is displayed.
- Press the **ENTER** button.
 - ☒ The saved Position appears on the left side of the OSD.



Moving to the remembered position

- Complete Step 1 of "Entering the menu".
- Pressing a Colour (Red, Green, Yellow) button moves the auto wall mount to the saved position.
 - ☒ You can move the wall mount to one of the 3 pre-set positions by pressing the Red (Position 1), Green (Position 2) or Yellow (Position 3) buttons.
 - ☒ If you adjust the Position after moving to a pre-set position, the position display will disappear.



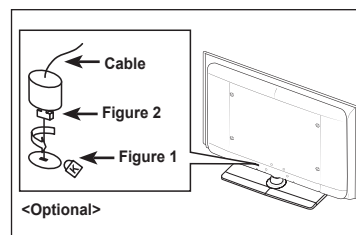
- ☒ For installation, refer to the Installation Manual provided with the wall mount.
- ☒ For product installation and the installation and moving of the wall mount, make sure to consult a specialized installation company.
- ☒ This installation manual is to be used when attaching the wall mount to a wall. When attaching to other building materials, please contact your nearest dealer.
- ☒ The auto wall mount will not work when Anynet+ or WISELINK Pro is operating.
- ☒ 37, 40 and 46 models are not compatible with the older wall mount model (WMN5090A).

Using the Anti-Theft Kensington Lock (depending on the model)

The Kensington Lock is a device used to physically fix the system when using it in a public place. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for proper use. The locking device has to be purchased separately.

1. Insert the locking device into the Kensington slot on the LCD TV (Figure 1) and turn it in the locking direction (Figure 2).
2. Connect the Kensington Lock cable.
3. Fix the Kensington Lock to a desk or a heavy stationary object.

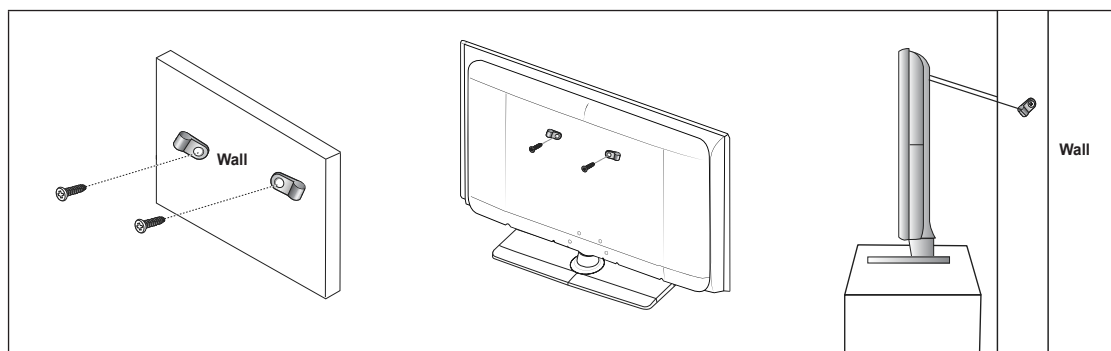
☒ The location of the Kensington Lock may be different depending on its model.



Securing the TV to the Wall



Caution: Pulling, pushing, or climbing on the TV may cause the TV to fall. In particular, ensure your children do not hang over or destabilize the TV; doing so may cause the TV to tip over, causing serious injuries or death. Follow all safety precautions provided on the included Safety Flyer. For added stability, install the anti-fall device for safety purposes, as follows.



To avoid the TV from falling:

1. Put the screws into the clamps and firmly fasten them onto the wall. Confirm that the screws have been firmly installed onto the wall.
 - ☒ You may need additional material such as an anchor depending on the type of wall.
 - ☒ Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.
2. Remove the screws from the center back of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.
 - ☒ Screws may not be supplied with the product. In this case, please purchase the screws of the following specifications.
 - ☒ Screw Specifications
 - For a 17 ~ 29 Inch LCD TV: M4 X 15 / For a 32 ~ 40 Inch LCD TV: M6 X 15
3. Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong string and then tie the string tightly.
 - ☒ Install the TV near to the wall so that it does not fall backwards.
 - ☒ It is safe to connect the string so that the clamps fixed on the wall are equal to or lower than the clamps fixed on the TV.
 - ☒ Untie the string before moving the TV.
4. Verify all connections are properly secured. Periodically check connections for any sign of fatigue for failure. If you have any doubt about the security of your connections, contact a professional installer.

Troubleshooting: Before Contacting Service Personnel

No sound or picture	<ul style="list-style-type: none"> • Check that the mains lead has been connected to a wall socket. • Check that you have pressed the button on your set. • Check the picture contrast and brightness settings. • Check the volume.
Normal picture but no sound	<ul style="list-style-type: none"> • Check the volume. • Check whether the MUTE button has been pressed on the remote control. • Check the "Select Speaker" settings.
Screen is black and power indicator light blinks steadily	<ul style="list-style-type: none"> • On your computer check; Power, Signal Cable. • The TV is using its power management system. • Move the computer's mouse or press any key on the keyboard.
No picture or black and white picture	<ul style="list-style-type: none"> • Adjust the colour settings. • Check that the broadcast system selected is correct.
Sound and picture interference	<ul style="list-style-type: none"> • Try to identify the electrical appliance that is affecting the set and move it further away. • Plug your set into a different mains socket.
Blurred or snowy picture, distorted sound	<ul style="list-style-type: none"> • Check the direction, location and connections of your aerial. • This interference is often due to the use of an indoor aerial.
Remote control malfunctions	<ul style="list-style-type: none"> • Replace the remote control batteries. • Clean the upper edge of the remote control (transmission window). • Check the battery terminals.
'Check signal cable.' message is displayed	<ul style="list-style-type: none"> • Check that the signal cable is firmly connected to the PC or video sources. • Check that the PC or video sources are turned on.
On PC mode, 'Not Supported Mode.' message is displayed	<ul style="list-style-type: none"> • Check the maximum resolution and the frequency of the video adaptor. • Compare these values with the data in the Display Modes.
The damaged picture appears in the corner of the screen	If "Just Scan" is selected in some external devices, the damaged picture may appear in the corner of the screen. This symptom is caused by external devices, not TV.
The 'Resets all settings to the default values.' message appears.	This appears when you press and hold the EXIT button for a while. The product settings are reset to the factory defaults.
You may see small particles if you look closely at the edge of the bezel surrounding the TV screen.	This is part of the product's design and is not a defect.

The TFT LCD panel uses a panel consisting of sub pixels (6 220 800) which require sophisticated technology to produce. However, there may be few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

Specifications

Model Name	LA46A850	LA52A850
Screen Size (Diagonal)	46 inches	52 inches
PC Resolution (Optimum)	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz
Sound Output	10W x 2	10W x 2
Dimensions (WxDxH) Body With stand	1 119 X 48 X 693 mm 1 119 X 283 X 745 mm	1 263 X 48 X 779 mm 1 263 X 314 X 832 mm
Weight With Stand	25 kg	31 kg
Environmental Considerations Operating Temperature Operating Humidity Storage Temperature Storage Humidity	10°C to 40°C (50°F to 104°F) 10% to 80%, non-condensing -20°C to 45°C (-4°F to 113°F) 5% to 95%, non-condensing	
Stand Swivel (Left / Right)	-20° ~ 20°	

- ☑ Design and specifications are subject to change without prior notice.
- ☑ This device is a Class B digital apparatus.
- ☑ For the power supply and Power Consumption, refer to the label attached to the product.

Additional Terms of Service

1. ACCEPTANCE OF TERMS

Yahoo! Inc. ("**Yahoo!**") welcomes you. **Yahoo!** provides its service to you subject to the following Terms of Service ("TOS"), which may be updated by us from time to time without notice to you. You can review the most current version of the TOS at any time at: <http://info.yahoo.com/legal/us/yahoo/utos/utos-173.html>. In addition, when using particular **Yahoo!** owned or operated services, you and **Yahoo!** shall be subject to any posted guidelines or rules applicable to such services, which may be posted from time to time. All such guidelines or rules (including but not limited to our Spam Policy) are hereby incorporated by reference into the TOS. **Yahoo!** may also offer other services that are governed by different Terms of Service. For instance, different terms apply to homesteaders on **Yahoo!** GeoCities or members of AT&T **Yahoo!** Dial or AT&T **Yahoo!** High Speed.

2. DESCRIPTION OF SERVICE

Yahoo! provides users with access to a rich collection of resources, including various communications tools, forums, shopping services, search services, personalized content and branded programming through its network of properties which may be accessed through any various medium or device now known or hereafter developed (the "Service"). You also understand and agree that the Service may include advertisements and that these advertisements are necessary for **Yahoo!** to provide the Service. You also understand and agree that the Service may include certain communications from **Yahoo!**, such as service announcements, administrative messages and the **Yahoo!** Newsletter, and that these communications are considered part of **Yahoo!** membership and you will not be able to opt out of receiving them. Unless explicitly stated otherwise, any new features that augment or enhance the current Service, including the release of new **Yahoo!** properties, shall be subject to the TOS. You understand and agree that the Service is provided "AS-IS" and that **Yahoo!** assumes no responsibility for the timeliness, deletion, mis-delivery or failure to store any user communications or personalization settings. You are responsible for obtaining access to the Service, and that access may involve third-party fees (such as Internet service provider or airtime charges). You are responsible for those fees, including those fees associated with the display or delivery of advertisements. In addition, you must provide and are responsible for all equipment necessary to access the Service.

Please be aware that **Yahoo!** has created certain areas on the Service that contain adult or mature content. You must be at least 18 years of age to access and view such areas.

3. YOUR REGISTRATION OBLIGATIONS

In consideration of your use of the Service, you represent that you are of legal age to form a binding contract and are not a person barred from receiving services under the laws of the United States or other applicable jurisdiction. You also agree to: (a) provide true, accurate, current and complete information about yourself as prompted by the Service's registration form (the "Registration Data") and (b) maintain and promptly update the Registration Data to keep it true, accurate, current and complete. If you provide any information that is untrue, inaccurate, not current or incomplete, or **Yahoo!** has reasonable grounds to suspect that such information is untrue, inaccurate, not current or incomplete, **Yahoo!** has the right to suspend or terminate your account and refuse any and all current or future use of the Service (or any portion thereof). **Yahoo!** is concerned about the safety and privacy of all its users, particularly children. For this reason, parents of children under the age of 13 who wish to allow their children access to the Service must create a **Yahoo!** Family Account. When you create a **Yahoo!** Family Account and add your child to the account, you certify that you are at least 18 years old and that you are the legal guardian of the child/children listed on the **Yahoo!** Family Account. By adding a child to your **Yahoo!** Family Account, you also give your child permission to access many areas of the Service, including, email, message boards and instant messaging (among others). Please remember that the Service is designed to appeal to a broad audience. Accordingly, as the legal guardian, it is your responsibility to determine whether any of the Service areas and/or Content (as defined in Section 6 below) are appropriate for your child.

4. **Yahoo!** PRIVACY POLICY

Registration Data and certain other information about you is subject to our Privacy Policy. For more information, see our full privacy policy at <http://info.yahoo.com/privacy/us/yahoo/>, or if you came from **Yahoo!** Kids, then see our **Yahoo!** Kids privacy policy at <http://www.yahooligans.com/docs/privacy/>. You understand that through your use of the Service you consent to the collection and use (as set forth in the Privacy Policy) of this information, including the transfer of this information to the United States and/or other countries for storage, processing and use by **Yahoo!** and its affiliates.

5. MEMBER ACCOUNT, PASSWORD AND SECURITY

You will receive a password and account designation upon completing the Service's registration process. You are responsible for maintaining the confidentiality of the password and account and are fully responsible for all activities that occur under your password or account. You agree to (a) immediately notify **Yahoo!** of any unauthorized use of your password or account or any other breach of security, and (b) ensure that you exit from your account at the end of each session. **Yahoo!** cannot and will not be liable for any loss or damage arising from your failure to comply with this Section 5.

6. MEMBER CONDUCT

You understand that all information, data, text, software, music, sound, photographs, graphics, video, messages, tags, or other materials ("Content"), whether publicly posted or privately transmitted, are the sole responsibility of the person from whom such Content originated. This means that you, and not **Yahoo!**, are entirely responsible for all Content that you upload, post, email, transmit or otherwise make available via the Service. **Yahoo!** does not control the Content posted via the Service and, as such, does not guarantee the accuracy, integrity or quality of such Content. You understand that by using the Service, you may be exposed to Content that is offensive, indecent or objectionable. Under no circumstances will **Yahoo!** be liable in any way for any Content, including, but not limited to, any errors or omissions in any Content, or any loss or damage of any kind incurred as a result of the use of any Content posted, emailed, transmitted or otherwise made available via the Service.

You agree to not use the Service to:

- a. upload, post, email, transmit or otherwise make available any Content that is unlawful, harmful, threatening, abusive, harassing, tortious, defamatory, vulgar, obscene, libelous, invasive of another's privacy, hateful, or racially, ethnically or otherwise objectionable;

- b. harm minors in any way;
- c. impersonate any person or entity, including, but not limited to, a **Yahoo!** official, forum leader, guide or host, or falsely state or otherwise misrepresent your affiliation with a person or entity;
- d. forge headers or otherwise manipulate identifiers in order to disguise the origin of any Content transmitted through the Service;
- e. upload, post, email or otherwise transmit any Content that you do not have a right to transmit under any law or under contractual or fiduciary relationships (such as inside information, proprietary and confidential information learned or disclosed as part of employment relationships or under nondisclosure agreements);
- f. upload, post, email or otherwise transmit any Content that infringes any patent, trademark, trade secret, copyright or other proprietary rights ("Rights") of any party;
- g. upload, post, email, transmit or otherwise make available any unsolicited or unauthorized advertising, promotional materials, "junk mail," "spam," "chain letters," "pyramid schemes," or any other form of solicitation, except in those areas (such as shopping) that are designated for such purpose (please read our complete Spam Policy);
- h. upload, post, email, transmit or otherwise make available any material that contains software viruses or any other computer code, files or programs designed to interrupt, destroy or limit the functionality of any computer software or hardware or telecommunications equipment;
- i. disrupt the normal flow of dialogue, cause a screen to "scroll" faster than other users of the Service are able to type, or otherwise act in a manner that negatively affects other users' ability to engage in real time exchanges;
- j. interfere with or disrupt the Service or servers or networks connected to the Service, or disobey any requirements, procedures, policies or regulations of networks connected to the Service;
- k. intentionally or unintentionally violate any applicable local, state, national or international law, including, but not limited to, regulations promulgated by the U.S. Securities and Exchange Commission, any rules of any national or other securities exchange, including, without limitation, the New York Stock Exchange, the American Stock Exchange or the NASDAQ, and any regulations having the force of law;
- l. provide material support or resources (or to conceal or disguise the nature, location, source, or ownership of material support or resources) to any organization(s) designated by the United States government as a foreign terrorist organization pursuant to section 219 of the Immigration and Nationality Act;
- m. "stalk" or otherwise harass another; and/or
- n. collect or store personal data about other users in connection with the prohibited conduct and activities set forth in paragraphs a through m above.

You acknowledge that **Yahoo!** may or may not pre-screen Content, but that **Yahoo!** and its designees shall have the right (but not the obligation) in their sole discretion to pre-screen, refuse, or remove any Content that is available via the Service. Without limiting the foregoing, **Yahoo!** and its designees shall have the right to remove any Content that violates the TOS or is otherwise objectionable. You agree that you must evaluate, and bear all risks associated with, the use of any Content, including any reliance on the accuracy, completeness, or usefulness of such Content. In this regard, you acknowledge that you may not rely on any Content created by **Yahoo!** or submitted to **Yahoo!**, including without limitation information in **Yahoo!** Message Boards and in all other parts of the Service.

You acknowledge, consent and agree that **Yahoo!** may access, preserve and disclose your account information and Content if required to do so by law or in a good faith belief that such access preservation or disclosure is reasonably necessary to: (a) comply with legal process; (b) enforce the TOS; (c) respond to claims that any Content violates the rights of third parties; (d) respond to your requests for customer service; or (e) protect the rights, property or personal safety of **Yahoo!**, its users and the public.

You understand that the technical processing and transmission of the Service, including your Content, may involve (a) transmissions over various networks; and (b) changes to conform and adapt to technical requirements of connecting networks or devices.

You understand that the Service and software embodied within the Service may include security components that permit digital materials to be protected, and that use of these materials is subject to usage rules set by **Yahoo!** and/or content providers who provide content to the Service. You may not attempt to override or circumvent any of the usage rules embedded into the Service. Any unauthorized reproduction, publication, further distribution or public exhibition of the materials provided on the Service, in whole or in part, is strictly prohibited.

7. INTERSTATE NATURE OF COMMUNICATIONS ON **Yahoo!** NETWORK

When you register with **Yahoo!**, you acknowledge that in using **Yahoo!** services to send electronic communications (including but not limited to email, search queries, sending messages to **Yahoo!** Chat or **Yahoo!** Groups, uploading photos and files to **Yahoo!** Photos or Briefcase, and other Internet activities), you will be causing communications to be sent through **Yahoo!**'s computer networks, portions of which are located in California, Texas, Virginia, and other locations in the United States and portions of which are located abroad. As a result, and also as a result of **Yahoo!**'s network architecture and business practices and the nature of electronic communications, even communications that seem to be intrastate in nature can result in the transmission of interstate communications regardless of where you are physically located at the time of transmission. Accordingly, by agreeing to this Terms of Service, you acknowledge that use of the service results in interstate data transmissions.

Yahoo! Messenger, including any web-based versions, will allow you and the people with whom you communicate to save your conversations in your **Yahoo!** accounts located on **Yahoo!** servers. This means you can access and search your message history from any computer with access to the internet. Whether or not you use this feature, other users may choose to use it to save conversations with you in their account on **Yahoo!** too. Your agreement to this TOS constitutes your consent to allow **Yahoo!** to store these communications on its servers. From time to time **Yahoo!** will send you notices through the

Yahoo! Messenger Service to let you know about important changes to the **Yahoo!** Messenger or related Services. Such messages may not be received if you violate this TOS by accessing the Service in an unauthorized manner. Your agreement to this TOS constitutes your agreement that you are deemed to have received any and all notices that would have been delivered had you accessed the Service in an authorized manner.

8. SPECIAL ADMONITIONS FOR INTERNATIONAL USE

Recognizing the global nature of the Internet, you agree to comply with all local rules regarding online conduct and acceptable Content. Specifically, you agree to comply with all applicable laws regarding the transmission of technical data exported from the United States or the country in which you reside.

9. CONTENT SUBMITTED OR MADE AVAILABLE FOR INCLUSION ON THE SERVICE

Yahoo! does not claim ownership of Content you submit or make available for inclusion on the Service. However, with respect to Content you submit or make available for inclusion on publicly accessible areas of the Service, you grant **Yahoo!** the following worldwide, royalty-free and non-exclusive license(s), as applicable:

- a. With respect to Content you submit or make available for inclusion on publicly accessible areas of **Yahoo!** Groups, the license to use, distribute, reproduce, modify, adapt, publicly perform and publicly display such Content on the Service solely for the purposes of providing and promoting the specific **Yahoo!** Group to which such Content was submitted or made available. This license exists only for as long as you elect to continue to include such Content on the Service and will terminate at the time you remove or **Yahoo!** removes such Content from the Service.
- b. With respect to photos, graphics, audio or video you submit or make available for inclusion on publicly accessible areas of the Service other than **Yahoo!** Groups, the license to use, distribute, reproduce, modify, adapt, publicly perform and publicly display such Content on the Service solely for the purpose for which such Content was submitted or made available. This license exists only for as long as you elect to continue to include such Content on the Service and will terminate at the time you remove or **Yahoo!** removes such Content from the Service.
- c. With respect to Content other than photos, graphics, audio or video you submit or make available for inclusion on publicly accessible areas of the Service other than **Yahoo!** Groups, the perpetual, irrevocable and fully sublicensable license to use, distribute, reproduce, modify, adapt, publish, translate, publicly perform and publicly display such Content (in whole or in part) and to incorporate such Content into other works in any format or medium now known or later developed. "Publicly accessible" areas of the Service are those areas of the **Yahoo!** network of properties that are intended by **Yahoo!** to be available to the general public. By way of example, publicly accessible areas of the Service would include **Yahoo!** Message Boards and portions of **Yahoo!** Groups, Photos and Briefcase that are open to both members and visitors. However, publicly accessible areas of the Service would not include portions of **Yahoo!** Groups that are limited to members, **Yahoo!** services intended for private communication such as **Yahoo!** Mail or **Yahoo!** Messenger, or areas off of the **Yahoo!** network of properties such as portions of World Wide Web sites that are accessible via hypertext or other links but are not hosted or served by **Yahoo!**.

10. CONTRIBUTIONS TO Yahoo!

By submitting ideas, suggestions, documents, and/or proposals ("Contributions") to **Yahoo!** through its suggestion or feedback webpages, you acknowledge and agree that: (a) your Contributions do not contain confidential or proprietary information; (b) **Yahoo!** is not under any obligation of confidentiality, express or implied, with respect to the Contributions; (c) **Yahoo!** shall be entitled to use or disclose (or choose not to use or disclose) such Contributions for any purpose, in any way, in any media worldwide; (d) **Yahoo!** may have something similar to the Contributions already under consideration or in development; (e) your Contributions automatically become the property of **Yahoo!** without any obligation of **Yahoo!** to you; and (f) you are not entitled to any compensation or reimbursement of any kind from **Yahoo!** under any circumstances.

11. INDEMNITY

You agree to indemnify and hold **Yahoo!** and its subsidiaries, affiliates, officers, agents, employees, partners and licensors harmless from any claim or demand, including reasonable attorneys' fees, made by any third party due to or arising out of Content you submit, post, transmit or otherwise make available through the Service, your use of the Service, your connection to the Service, your violation of the TOS, or your violation of any rights of another.

12. NO RESALE OF SERVICE

You agree not to reproduce, duplicate, copy, sell, trade, resell or exploit for any commercial purposes, any portion of the Service (including your **Yahoo!** ID), use of the Service, or access to the Service.

13. GENERAL PRACTICES REGARDING USE AND STORAGE

You acknowledge that **Yahoo!** may establish general practices and limits concerning use of the Service, including without limitation the maximum number of days that email messages, message board postings or other uploaded Content will be retained by the Service, the maximum number of email messages that may be sent from or received by an account on the Service, the maximum size of any email message that may be sent from or received by an account on the Service, the maximum disk space that will be allotted on **Yahoo!**'s servers on your behalf, and the maximum number of times (and the maximum duration for which) you may access the Service in a given period of time. You agree that **Yahoo!** has no responsibility or liability for the deletion or failure to store any messages and other communications or other Content maintained or transmitted by the Service. You acknowledge that **Yahoo!** reserves the right to log off accounts that are inactive for an extended period of time. You further acknowledge that **Yahoo!** reserves the right to modify these general practices and limits from time to time.

14. MODIFICATIONS TO SERVICE

Yahoo! reserves the right at any time and from time to time to modify or discontinue, temporarily or permanently, the Service (or any part thereof) with or without notice. You agree that **Yahoo!** shall not be liable to you or to any third party for any modification, suspension or discontinuance of the Service.

15. TERMINATION

You agree that **Yahoo!** may, under certain circumstances and without prior notice, immediately terminate your **Yahoo!** account, any associated email address, and access to the Service. Cause for such termination shall include, but not be limited to, (a) breaches or violations of the TOS or other incorporated agreements or guidelines, (b) requests by law enforcement or other government agencies, (c) a request by you (self-initiated account deletions), (d) discontinuance or material modification to the Service (or any part thereof), (e) unexpected technical or security issues or problems, (f) extended periods of inactivity, (g) engagement by you in fraudulent or illegal activities, and/or (h) nonpayment of any fees owed by you in connection with the Services. Termination of your **Yahoo!** account includes (a) removal of access to all offerings within the Service, including but not limited to **Yahoo!** Mail, Groups, Messenger, Chat, Domains, Personals, Auctions, Message Boards, Greetings, Alerts and Games, (b) deletion of your password and all related information, files and content associated with or inside your account (or any part thereof), and (c) barring of further use of the Service. Further, you agree that all terminations for cause shall be made in **Yahoo!**'s sole discretion and that **Yahoo!** shall not be liable to you or any third party for any termination of your account, any associated email address, or access to the Service.

16. DEALINGS WITH ADVERTISERS

Your correspondence or business dealings with, or participation in promotions of, advertisers found on or through the Service, including payment and delivery of related goods or services, and any other terms, conditions, warranties or representations associated with such dealings, are solely between you and such advertiser. You agree that **Yahoo!** shall not be responsible or liable for any loss or damage of any sort incurred as the result of any such dealings or as the result of the presence of such advertisers on the Service.

17. LINKS

The Service may provide, or third parties may provide, links to other World Wide Web sites or resources. Because **Yahoo!** has no control over such sites and resources, you acknowledge and agree that **Yahoo!** is not responsible for the availability of such external sites or resources, and does not endorse and is not responsible or liable for any Content, advertising, products or other materials on or available from such sites or resources. You further acknowledge and agree that **Yahoo!** shall not be responsible or liable, directly or indirectly, for any damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such Content, goods or services available on or through any such site or resource.

18. YAHOO!'S PROPRIETARY RIGHTS

You acknowledge and agree that the Service and any necessary software used in connection with the Service ("Software") contain proprietary and confidential information that is protected by applicable intellectual property and other laws. You further acknowledge and agree that Content contained in sponsor advertisements or information presented to you through the Service or by advertisers is protected by copyrights, trademarks, service marks, patents or other proprietary rights and laws. Except as expressly permitted by applicable law or authorized by **Yahoo!** or advertisers, you agree not to modify, rent, lease, loan, sell, distribute or create derivative works based on the Service or the Software, in whole or in part.

Yahoo! grants you a personal, non-transferable and non-exclusive right and license to use the object code of its Software on a single computer; provided that you do not (and do not allow any third party to) copy, modify, create a derivative work from, reverse engineer, reverse assemble or otherwise attempt to discover any source code, sell, assign, sublicense, grant a security interest in or otherwise transfer any right in the Software. You agree not to modify the Software in any manner or form, nor to use modified versions of the Software, including (without limitation) for the purpose of obtaining unauthorized access to the Service. You agree not to access the Service by any means other than through the interface that is provided by **Yahoo!** for use in accessing the Service.

19. DISCLAIMER OF WARRANTIES

YOU EXPRESSLY UNDERSTAND AND AGREE THAT:

- a. YOUR USE OF THE SERVICE IS AT YOUR SOLE RISK. THE SERVICE IS PROVIDED ON AN "AS IS" AND "AS AVAILABLE" BASIS. YAHOO AND ITS SUBSIDIARIES, AFFILIATES, OFFICERS, EMPLOYEES, AGENTS, PARTNERS AND LICENSORS EXPRESSLY DISCLAIM ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.
- b. **Yahoo!** AND ITS SUBSIDIARIES, AFFILIATES, OFFICERS, EMPLOYEES, AGENTS, PARTNERS AND LICENSORS MAKE NO WARRANTY THAT (i) THE SERVICE WILL MEET YOUR REQUIREMENTS; (ii) THE SERVICE WILL BE UNINTERRUPTED, TIMELY, SECURE OR ERROR-FREE; (iii) THE RESULTS THAT MAY BE OBTAINED FROM THE USE OF THE SERVICE WILL BE ACCURATE OR RELIABLE; (iv) THE QUALITY OF ANY PRODUCTS, SERVICES, INFORMATION OR OTHER MATERIAL PURCHASED OR OBTAINED BY YOU THROUGH THE SERVICE WILL MEET YOUR EXPECTATIONS; AND (v) ANY ERRORS IN THE SOFTWARE WILL BE CORRECTED.
- c. ANY MATERIAL DOWNLOADED OR OTHERWISE OBTAINED THROUGH THE USE OF THE SERVICE IS ACCESSED AT YOUR OWN DISCRETION AND RISK, AND YOU WILL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO YOUR COMPUTER SYSTEM OR LOSS OF DATA THAT RESULTS FROM THE DOWNLOAD OF ANY SUCH MATERIAL.
- d. NO ADVICE OR INFORMATION, WHETHER ORAL OR WRITTEN, OBTAINED BY YOU FROM **Yahoo!** OR THROUGH OR FROM THE SERVICE SHALL CREATE ANY WARRANTY NOT EXPRESSLY STATED IN THE TOS.
- e. A SMALL PERCENTAGE OF USERS MAY EXPERIENCE EPILEPTIC SEIZURES WHEN EXPOSED TO CERTAIN LIGHT PATTERNS OR BACKGROUNDS ON A COMPUTER SCREEN OR WHILE USING THE SERVICE. CERTAIN CONDITIONS MAY INDUCE PREVIOUSLY UNDETECTED EPILEPTIC SYMPTOMS EVEN IN USERS WHO HAVE e. NO HISTORY OF PRIOR SEIZURES OR EPILEPSY. IF YOU, OR ANYONE IN YOUR FAMILY, HAVE AN EPILEPTIC CONDITION, CONSULT YOUR PHYSICIAN PRIOR TO USING THE SERVICE. IMMEDIATELY DISCONTINUE USE OF THE SERVICE AND CONSULT YOUR PHYSICIAN IF YOU EXPERIENCE ANY OF THE FOLLOWING SYMPTOMS WHILE USING THE SERVICE: DIZZINESS, ALTERED VISION, EYE OR MUSCLE TWITCHES, LOSS OF AWARENESS, DISORIENTATION, ANY INVOLUNTARY MOVEMENT, OR CONVULSIONS.

20. LIMITATION OF LIABILITY

YOU EXPRESSLY UNDERSTAND AND AGREE THAT **Yahoo!** AND ITS SUBSIDIARIES, AFFILIATES, OFFICERS, EMPLOYEES, AGENTS, PARTNERS AND LICENSORS SHALL NOT BE LIABLE TO YOU FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFITS, GOODWILL, USE, DATA OR OTHER INTANGIBLE LOSSES (EVEN IF **Yahoo!** HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES), RESULTING FROM: (i) THE USE OR THE INABILITY TO USE THE SERVICE; (ii) THE COST OF PROCUREMENT OF SUBSTITUTE GOODS AND SERVICES RESULTING FROM ANY GOODS, DATA, INFORMATION OR SERVICES PURCHASED OR OBTAINED OR MESSAGES RECEIVED OR TRANSACTIONS ENTERED INTO THROUGH OR FROM THE SERVICE; (iii) UNAUTHORIZED ACCESS TO OR ALTERATION OF YOUR TRANSMISSIONS OR DATA; (iv) STATEMENTS OR CONDUCT OF ANY THIRD PARTY ON THE SERVICE; OR (v) ANY OTHER MATTER RELATING TO THE SERVICE.

21. EXCLUSIONS AND LIMITATIONS

SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF CERTAIN WARRANTIES OR THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. ACCORDINGLY, SOME OF THE ABOVE LIMITATIONS OF SECTIONS 19 AND 20 MAY NOT APPLY TO YOU.

22. SPECIAL ADMONITION FOR SERVICES RELATING TO FINANCIAL MATTERS

If you intend to create or join any service, receive or request any news, messages, alerts or other information from the Service concerning companies, stock quotes, investments or securities, please read the above Sections 19 and 20 again. They go doubly for you. In addition, for this type of information particularly, the phrase "Let the investor beware" is apt. The Service is provided for informational purposes only, and no Content included in the Service is intended for trading or investing purposes. **Yahoo!** and its licensors shall not be responsible or liable for the accuracy, usefulness or availability of any information transmitted or made available via the Service, and shall not be responsible or liable for any trading or investment decisions based on such information.

23. NO THIRD-PARTY BENEFICIARIES

You agree that, except as otherwise expressly provided in this TOS, there shall be no third-party beneficiaries to this agreement.

24. NOTICE

Yahoo! may provide you with notices, including those regarding changes to the TOS, including by but not limited to email, regular mail, SMS, MMS, text message, postings on the Service, or other reasonable means now known or hereinafter developed.

25. TRADEMARK INFORMATION

The **Yahoo!**, **Yahoo!** logo, **Yahoo!** (in Chinese characters), **YAHOO!IGANS!**, **Yahooligans!** logo, **Yahoo! KIDS**, **Yahoo!** Kids logo, **Jumpin' Y Guy** logo, **DO YOU Yahoo!?**, **Y!**, **Y!** logo, **MY Yahoo!**, **Y!** and **Star** logo, **Yahoo! YODEL**, **Yahoo!** EVERYWHERE, **Yahoo!** GROUPS, **Yahoo!** MAIL OUTPOST, **Yahoo!** VISION, **Eyeballs** logo, **12 DAYS OF GIVING**, **1800MYAHOO**, **ACCENTRIC**, **BETTER JOBS FOR A BETTER LIFE**, **BINGO**, **BROADCAST.COM**, **CAMP Yahoo!**, **CORPORATE Yahoo!**, **CYBERSET**, **EGROUPS**, **FANTASY CAREERS**, **FOR ALL THAT SURFING YOU NEED THE RIGHT BOARD**, **FORTIFIED WITH Yahoo!**, **FUTUREBUILDER**, **GAMEPROWLER**, **GameProwler** logo, **GEOCITIES**, **GeoCities** logo, **GEOCITIES** (in Chinese characters), **GET LOCAL**, **Hexagon Design**, **HOPE FOR THE HOLIDAYS**, **HOTJOBS**, **HOW DO YOU MOVE YOUR MONEY?**, **HUMAN COUPON**, **IMVIRONMENTS**, **INKTOMI**, **INTERNET AT THE SPEED OF YOU**, **INVOLVEMENT BRANDING**, **IPO ROW**, **JT'S BLOCKS**, **LIVING ROOM ACTIVE**, **MATCHCAST**, **NAVAL COMMAND**, **PERMISSION MARKETING**, **PERSONAL EDGE**, **PERSONAL NOTES HOSTED BY DAVE KOZ**, **RESLEX**, **RESUMIX**, **ROCKETMAIL**, **SAFETY SHIELD**, **SCALING THE INTERNET**, **SHOPFIND**, **SOFTSHOE**, **SPORTSTREAM** and **Design**, **Star Design**, **STATTRACKER**, **THE BIG PICTURE**, **THE EXPERIENCED PROFESSIONAL'S JOB BOARD**, **THE ORIGINAL TEXAS YA-HOO CAKE CO.** and **Design**, **THE WEB'S HOTTEST JOBS**, **TOKI TOKI BOOM**, **TRAFFIC CONTROLLER**, **TRAFFIC SERVER**, **TURN IT ON**, **VALUELAB**, **VIVASMARK**, **WEB CORPS**, **Web Corps** logo, **WORD RACER**, **WORDAHOLIC**, **WORKWORLD**, **WWW.HOTJOBS.COM**, **YEF**, and **YOUR HOME ON THE WEB** trademarks and service marks and other **Yahoo!** logos and product and service names are trademarks of **Yahoo!** Inc. (the "**Yahoo!** Marks"). Without **Yahoo!**'s prior permission, you agree not to display or use in any manner the **Yahoo!** Marks.

26. NOTICE AND PROCEDURE FOR MAKING CLAIMS OF COPYRIGHT OR INTELLECTUAL PROPERTY INFRINGEMENT

Yahoo! respects the intellectual property of others, and we ask our users to do the same. **Yahoo!** may, in appropriate circumstances and at its discretion, disable and/or terminate the accounts of users who may be repeat infringers. If you believe that your work has been copied in a way that constitutes copyright infringement, or your intellectual property rights have been otherwise violated, please provide **Yahoo!**'s Copyright Agent the following information:

- a. an electronic or physical signature of the person authorized to act on behalf of the owner of the copyright or other intellectual property interest;
- b. a description of the copyrighted work or other intellectual property that you claim has been infringed;
- c. a description of where the material that you claim is infringing is located on the site;
- d. your address, telephone number, and email address;
- e. a statement by you that you have a good faith belief that the disputed use is not authorized by the copyright owner, its agent, or the law;
- f. a statement by you, made under penalty of perjury, that the above information in your Notice is accurate and that you are the copyright or intellectual property owner or authorized to act on the copyright or intellectual property owner's behalf.

Yahoo!'s Agent for Notice of claims of copyright or other intellectual property infringement can be reached as follows:

By mail:

Copyright Agent

c/o **Yahoo!** Inc.

701 First Avenue

Sunnyvale, CA 94089

By phone: (408) 349-5080

By fax: (408) 349-7821

By email: copyright@yahoo-inc.com

27. GENERAL INFORMATION

Entire Agreement. The TOS constitutes the entire agreement between you and **Yahoo!** and governs your use of the Service, superseding any prior agreements between you and **Yahoo!** with respect to the Service. You also may be subject to additional terms and conditions that may apply when you use or purchase certain other **Yahoo!** services, affiliate services, third-party content or third-party software.

Choice of Law and Forum. The TOS and the relationship between you and **Yahoo!** shall be governed by the laws of the State of California without regard to its conflict of law provisions. You and **Yahoo!** agree to submit to the personal and exclusive jurisdiction of the courts located within the county of Santa Clara, California.

Waiver and Severability of Terms. The failure of **Yahoo!** to exercise or enforce any right or provision of the TOS shall not constitute a waiver of such right or provision. If any provision of the TOS is found by a court of competent jurisdiction to be invalid, the parties nevertheless agree that the court should endeavor to give effect to the parties' intentions as reflected in the provision, and the other provisions of the TOS remain in full force and effect.

No Right of Survivorship and Non-Transferability. You agree that your **Yahoo!** account is non-transferable and any rights to your **Yahoo!** ID or contents within your account terminate upon your death. Upon receipt of a copy of a death certificate, your account may be terminated and all contents therein permanently deleted.

Statute of Limitations. You agree that regardless of any statute or law to the contrary, any claim or cause of action arising out of or related to use of the Service or the TOS must be filed within one (1) year after such claim or cause of action arose or be forever barred.

The section titles in the TOS are for convenience only and have no legal or contractual effect.

28. VIOLATIONS

Please report any violations of the TOS to our Customer Care group.